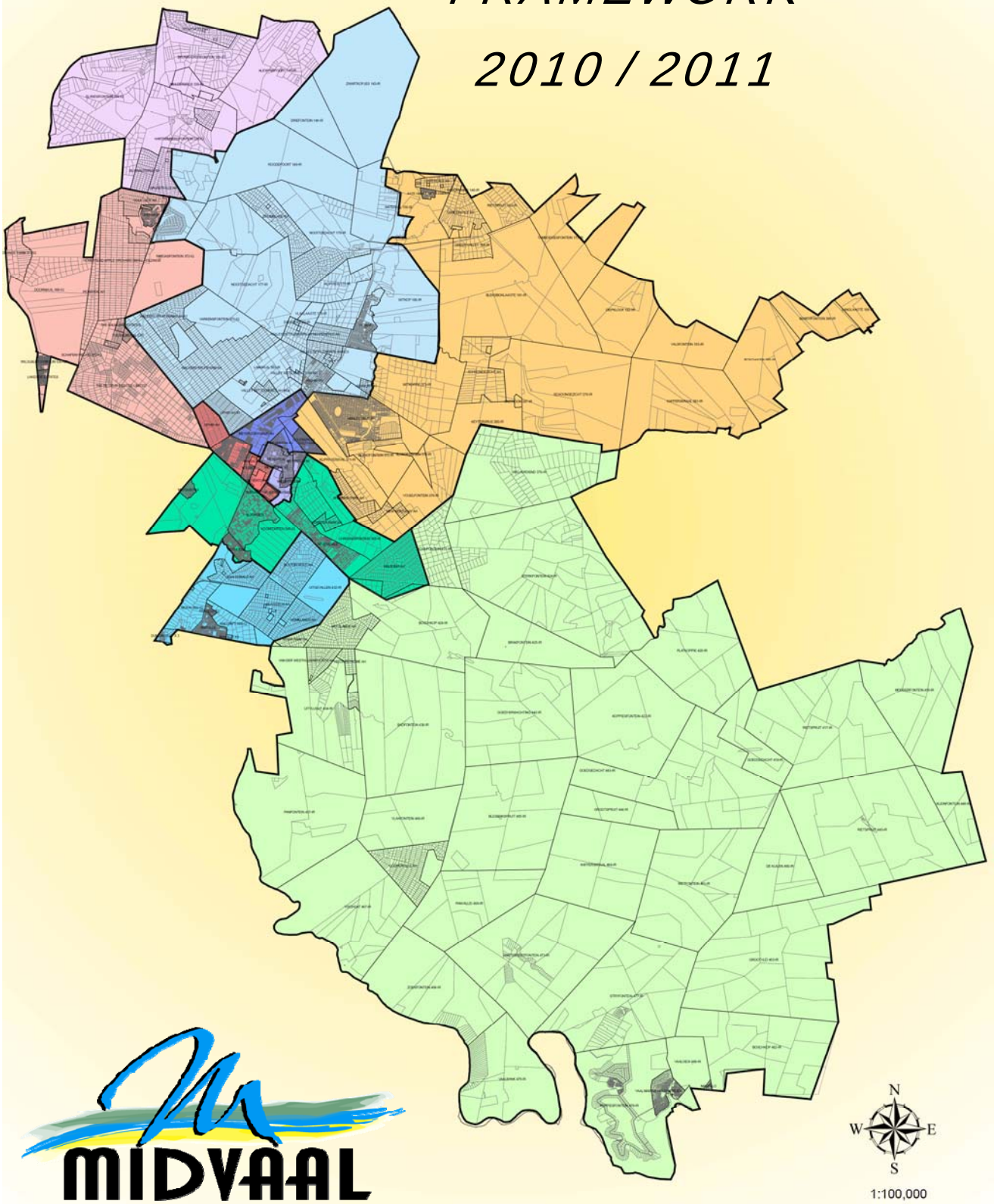
DRAFT
SPATIAL DEVELOPMENT FRAMEWORK
2010 / 2011



MIDVAAL
LOCAL MUNICIPALITY
MASEPALA WA SELEHAE
PLAASLIKE MUNISIPALITEIT

Compiled by M. Coetzee - Development and Planning

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MIDVAAL LOCAL MUNICIPALITY
SPATIAL DEVELOPMENT FRAMEWORK
2010 / 2011

CHAPTER 1: BACK GROUND

1.1 INTRODUCTION

This document forms part of the Sedibeng District Municipality's wide Spatial Development Framework [SDF] review of 2008/2009. The SDF review is undertaken during the 2008/9 IDP formulation process. The current Midvaal Local Municipality SDF has a number of shortcomings and gaps which have been addressed in the revision exercise, and the revised 2009 SDF is a comprehensive document complying with all the requirements as set out in the relevant legislation.

The Midvaal provides a broad spatial terms of reference for all government decision-making pertaining to future development in the municipality is a component of the Midvaal IDP, specifically and Sedibeng District, generally. .

The first national democratic elections that took place in South Africa during 1994 signalled a new era for planning. Forty years of "apartheid planning" was brought to a close, but with it came monumental development challenges.

All three spheres of government were faced with a number of priority issues that had to be addressed via restructuring and transformation processes. At the epicentre of the development challenge(s) facing South Africa was (and still is) the challenge of ridding the country of the distortions created by the apartheid-space-economy.

In an attempt to do so, a number of priority interventions were established that needed to be dealt with, and addressed, by all local authorities. These included:

- Organisational restructuring
- Financial viability improvement
- Social upgrading and upliftment
- Spatial restructuring
- Service and infrastructure upgrading; and
- Economic development and job creation.

In an attempt to specifically deal with the spatial restructuring component in an integrated manner, and to comply with the Municipal Systems Act (2000), local authorities embarked on a process of formulating Spatial Development Frameworks (SDFs) for their areas of jurisdiction as part of their Integrated Development Plans (IDPs).

1.2 LEGAL FRAMEWORK

- ***THE MUNICIPAL SYSTEMS ACT, 2000 [ACT NO. 32 OF 2000]***

In terms of Chapter 5 of the Municipal Systems Act each local authority in South Africa is required to compile an Integrated Development Plan for its area of jurisdiction. In Section 26 of the Municipal Systems Act it is furthermore stated that the core components of an Integrated Development Plan are the following:

a) the **municipal council's vision** for the long term development of the municipality with special emphasis on the municipality's most critical development and internal transformation needs;

b) an **assessment of the existing level of development** in the municipality, which must include an identification of communities which do not have access to basic municipal services;

c) the **council's development priorities and objectives** for its elected term, including its local economic development aims and its internal transformation needs;

d) the **council's development strategies** which must be aligned with any national or provincial sectoral plans and planning requirements binding on the municipality in terms of legislation;

e) a **spatial development framework** which must include the provision of basic guidelines for a land use management system for the municipality;

f) the **council's operational strategies**;

g) applicable **disaster management plans**;

h) a **financial plan,** which must include a budget projection for at least the next three years; and

i) the **key performance indicators and performance targets** determined.

One of the elements of an Integrated Development Plan listed above [paragraph (e)] is thus the Spatial Development Framework. This document deals with that component of the IDP.

- ***GOVERNMENT GAZETTE NO.22605 OF 2001***

In terms of **Government Gazette No.** 22605 dated 24 August 2001, a Spatial Development Framework of an Integrated Development Plan should at least achieve the following objectives:

a) to **give effect to the principles of land development** as contained in Chapter 1 of the Development Facilitation Act [Act 67 of 1995];

b) to **set out objectives** that reflect the desired spatial form of the municipality;

c) to **contain strategies and policies** regarding the manner in which to achieve the objectives referred to above, which strategies and policies must:

   i. indicate **desired patterns of land use** within the municipality;

   ii. address the **spatial reconstruction of the municipality**; and

   iii. **provide strategic guidance** in respect of the location and nature of development within the municipality

d) to set out **basic guidelines for a land use management system** in the municipality;

e) to set out a **capital investment framework** for the municipality's development programmes;

f) to contain a **strategic assessment of the environmental impact** of the spatial development framework;

g) to **identify programmes and projects** for the development of land within the municipality;

h) to be **aligned with the Spatial Development Frameworks** reflected in the Integrated Development Plans **of neighbouring municipalities**; and

i) to provide a **visual representation of the desired spatial form** of the municipality, which representation will indicate where **public and private land development** and **infrastructure investment** should take place,

- ***THE GAUTENG PLANNING AND DEVELOPMENT ACT, 2003 [ACT 3 OF 2003]***

Section 31 of the Gauteng Planning and Development Act, 2003, stipulates that :

a) Metropolitan and local municipalities shall formulate spatial development frameworks;

b) District municipalities shall formulate a spatial development framework for the district as a whole, within which local municipalities in the area of the district municipality shall formulate more detailed and specific spatial development frameworks which shall be consistent with the district spatial development framework; and

c) A spatial development framework shall form part of an integrated development plan prepared by a municipality in terms of section 32 of the Local Government Municipal Systems Act, 2000.

Section 32 of the Act stipulates that the subject matter of an SDF shall include:

a) the representation in the form of a map or maps together with an explanatory report of the desired spatial form of the municipality, and

b) the indication of where public and private development and infrastructure investment should take place;

c) the indication of desired development and land use patterns for different areas;

d) the indication of where development or particular land-uses should be discouraged or restricted;

e) the principles set out in the Act;

   i. the broad indication of the areas where priority spending should take place; and

   ii. the provisions of guidelines for development and land use decision-making by the municipality.

Section 34 of the Act prescribes that any SDF should be aligned with adjoining SDF's, the provincial SDF and other national and provincial plans, policies, strategies and programmes in respect of spatial planning and development.

Section 35 of the Act stipulates that municipalities must formally adopt Spatial Development Frameworks and must give notice of such adoption in the Provincial Gazette.

In addition to existing legislation, a range of national, provincial and local development policies and plans exist to further guide and direct development in South Africa. Three of these, namely the **National Spatial Development Perspective (NSDP)**, the **Provincial Gauteng Growth and Development (GPGDS)**,and the **National Integrated Sustainable Rural Development Strategy (ISRDS)** are of particular importance in developing a Development Framework for the District as well as to guide the local municipalities in a clear direction..

The following section briefly deals with each, and highlights the most important guidelines presented.

- ***NATIONAL AND PROVINCIAL POLICY AND LEGISLATIVE IMPERATIVES***

  - **NATIONAL 2014 VISION**

As part of South Africa's celebration of 10 years of democracy, National Government formulated Vision 2014 to guide itself for the next ten years. The vision is to build a society that is truly united, non-racial, non-sexist and democratic. Central to this is a single and integrated economy that benefits all.

The combination of some of the most important targets and objectives making up Vision 2014 are as follows:

- *Reduce unemployment by half* through new jobs, skills development, assistance to small businesses, opportunities for self-employment and sustainable community livelihoods.

- *Reduce poverty by half through economic development, comprehensive social security, land reform and improved household and community assets.*

- *Provide the skills required by the economy, build capacity and provide resources across society to encourage self-employment with an education system that is geared for productive work, good citizenship and a caring society.*

- *Ensure that all South Africans, including especially the poor and those at risk – children, youth, women, the aged and people with disabilities – are fully able to exercise their constitutional rights and enjoy the full dignity of freedom.*

- *Compassionate government service to the people*: national, provincial and local public representatives who are accessible; and citizens who know their rights and insist on fair treatment and efficient service.

- Massively reduce health risks such as tuberculoses, diabetes, malnutrition and maternal deaths and turn the tide against HIV and AIDS, and, working with the rest of Southern Africa, strive to eliminate malaria, and improve services to achieve a better national health profile and reduction of preventable causes of death, including violent crime and road accidents.

- Significantly reduce the number of serious and priority crimes as well as cases awaiting trial, with a society that actively challenges crime and corruption, and with programmes that also address the social roots of criminality.

- Position South Africa strategically as an effective force in global relations, with vibrant and balanced trade and other relations with countries of the South and the North, and in an Africa that is growing, prospering and benefiting all Africans, especially the poor.

Vision 2014 translates into practical steps, with the following specific implications for the Midvaal Municipality:

- A growing economy.
- Sustainable livelihoods – inter alia creating job opportunities through the Expanded Public Works Programme (EPWP).
- Access to services:
    - Speed up programmes to provide water, sanitation and electricity.

  - Build more subsidised housing.
  - Improve services in health facilities.
  - Ensure that all children have decent educational facilities and services.
  - Realise Batho Pele principles and improve services in government offices.
- Comprehensive Social Security.
- Prevention of crime and corruption through enhanced, visible policing.
- Constitutional rights and governance through improved interaction between government and the people.

- ***NATIONAL SPATIAL DEVELOPMENT PERSPECTIVE (NSDP)***

The National Spatial Development Perspective was initiated in 1999 with the aim of not only providing a strategic assessment of the spatial distribution and socio-economic characteristics of the South African population, but also gaining an understanding of the distribution of economic activity and potential across the South African landscape. Based on the research conducted, and with key trends and issues identified, the NSDP currently delineates a number of guidelines for infrastructure investment in South Africa.

The rationale behind the guidelines is rooted in the argument of **rather than investing in physical infrastructure to improve the quality of life of people living in low productivity areas, government should rather invest in people.** The logic of the latter argument is that investing in people is a more efficient use of government resources. Investing in people potentially results in increased opportunity and choice to relocate to high growth areas. Investing in places can leave people trapped in low growth areas without any guarantee that this will attract new investment into the area.

Hence, in essence, the NSDP argues that government's social objectives will be best achieved through infrastructure investment in economically sustainable areas with proven development potential. Therefore, **areas displaying little or no potential for growth should only be provided with the constitutionally mandated minimum levels of services**, and the focus of government spending should rather be on the people, i.e. social development spending. Social development spending may involve developing labour market intelligence, human resource development, and health and social transfers. Crucially, this kind of "development spending" is specifically aimed at enabling the South African youth located in areas in which they have no hope of finding employment, to gradually gravitate to areas with high economic potential.

Consistent with this philosophy, and given the need to reach and sustain an annual economic growth rate of 6% each year, the NSDP argues that resources and collaborative government action should be concentrated on maintaining and growing the economy in the 26 locations currently contributing 83% of the national GVA (see the NSDP document). This strategy is supported by the belief that through investing in these areas, the bulk of those living in poverty in South Africa will also be reached. Currently, the Sedibeng District Municipality hosts one of the 21 functional urban areas with the biggest contribution to the national economy, namely Vereeniging in the Emfuleni LM.

As such, Vereeniging and its surrounding area (which includes Meyerton and Vanderbijlpark and Heidelberg) should be the **primary focus area for infrastructure investment within the District**. Consistent with the principles of the NSDP, areas other than Vereeniging displaying both high levels of economic potential and poverty should also be the focus of more extensive infrastructure spending.

Furthermore, in line with the NSDP, government spending should primarily be focused on "social development spending," and only providing the constitutionally mandated minimum levels of services to the numerous other settlements spread throughout the DM.

In this spirit the NDSDP proposes four sets of actions that the various spheres of government should partake in to reach its key economic and social inclusion targets. These are:

A set of generic actions such as more robust economic analysis, "proper" spatial development planning and improved monitoring and review;
Actions aimed at diversifying, strengthening and sustaining the economy and improving the integration between spaces of need and economic activity in the areas of significant economic activity, high concentrations of people and high levels of poverty;
Focused economic development actions in the areas with low levels of economic activity, high concentrations of people, and high levels of poverty; and
Supportive actions to be undertaken by each of the spheres of government to give effect to the objectives of the State.
Following from the broad philosophy and actions put forward by the NSDP, various principles to guide development decisions have also been formulated. A brief summary of these principles is given below:

Economic growth is a prerequisite for the achievement of other policy objectives, key among which would be poverty alleviation.

Government spending on fixed investment, beyond the constitutional obligation to provide basic services to all citizens (such as water, electricity as well as health and educational facilities), would therefore be focused on localities of economic growth and/or economic potential in order to attract private-sector investment, stimulate sustainable economic activities and/or create long-term employment opportunities.

Efforts to address past and current social inequalities should focus on people, not places. In localities where there are both high levels of poverty and development potential, this could include fixed capital investment beyond basic services to exploit the potential of those localities.

In localities with low development potential, government spending, beyond basic services, should focus on providing social transfers, human resource development and labour market intelligence. This will enable people to become more mobile and migrate, if they choose to, to localities that are more likely to provide sustainable employment or other economic opportunities.

In order to overcome the spatial distortions of apartheid, future settlement and economic development opportunities should be channelled into activity corridors and nodes that are adjacent to or link the main growth centres. Infrastructure investment and development spending should primarily support localities that will become major growth nodes in South Africa and the Southern African Development Community region to create regional gateways to the global economy.

- ***THE ACCELERATED AND SHARED GROWTH INITIATIVE FOR SOUTH AFRICA (ASGISA)***

The **Accelerated and Shared Growth Initiative for South Africa (ASGISA)** has identified a series of decisive national interventions to ensure that South Africa achieves the set growth rate (6%) needed to meet its social objectives. The interventions have been classified into six categories, which impact specifically in terms of the GDS, namely:

- Infrastructure programmes;
- Sector investment (or industrial) strategies;
- Skills and education initiatives;
- Second economy interventions;
- Macro-economic issues; and
- Public administration issues.

Nationally significant provincial infrastructure projects in Gauteng with relevance to the Sedibeng District Municipality include:

The R59 Development Corridor, which runs just north/southerly direction of the District.

Furthermore, the following infrastructure projects and “Programmes of Action” associated with ASGISA are applicable to the Province in general, and include *inter alia*:

a) Upgrading of the Further Education and Training colleges;
b) **Improving the availability and reliability of infrastructure services** such as provincial and local roads, bulk water infrastructure and water supply networks, energy distribution, housing, schools and clinics, business centres, and sports and recreation facilities;
c) The development and **implementation of multi-purpose government service centres**, including police stations, courts and correctional facilities;
d) **Maximum exploitation of agricultural potential** and opportunities;
e) Promotion of the arts and culture industry;
f) **Tourism growth promotion** and the preservation and development of heritage sites;
g) Export promotion;
h) **SMME development**;
i) Extended Public Works Programme (EPWP);
j) **Local Economic Development** (LED);
k) Urban and Rural Development Programme; and
l) **Environmental management**.

Essentially then, a SDF for the MLM should propose a spatial strategy that will help / enable the District Municipality to realize, and align themselves with the above mentioned interventions and infrastructure projects.

- ***THE NATIONAL INTEGRATED SUSTAINABLE RURAL DEVELOPMENT STRATEGY (ISRDS)***

As Midvaal LM is mostly rural, it is imperative to acknowledge the relevance of the National Integrated Sustainable Rural Development Strategy (ISRDS)Rural South Africa is faced with conditions that are widely associated with rural areas around the world, such as high levels of poverty, constrained incomes due to economies that are not sufficiently vibrant, and sparse populations. Furthermore, to add to the already dire situation, South Africa has some unique features and development challenges derived from the legacy of planned economic marginalisation by the former homeland system of the then apartheid government. Consequently, South Africa features numerous marginalised high density settlements isolated from economic opportunities and basic infrastructure provision.

In order to rectify this situation, the government launched the Integrated and Sustainable Rural Development Strategy (ISRDS). The ISRDS is designed to realise a vision that will **"attain socially cohesive and stable rural communities with viable institutions, sustainable economies and universal access to social amenities, able to attract and retain skilled and knowledgeable people, who are equipped to contribute to growth and development"**. Translated, the strategy simply presents an opportunity for South Africa's rural people to realise their own potential and contribute more fully to their country's future.

The **principles** behind the ISRDS are:

a) **Rural development**: is multi-dimensional and much broader than poverty alleviation through social programs and transfers; it places emphasis on changing environments to enable poor people to earn more, invest in themselves and their communities and contribute toward maintenance of key infrastructure; a successful strategy will make people less poor, rather than more comfortable in their poverty.

b) **Sustainable**: sustainability is derived from increased local growth, and where rural people care about success and are able to access resources to keep the strategy going.

c) **Integrated**: integration is complex and requires effective co-ordination across traditional sectors in all levels of government; the Integrated Development Plan (IDP) process will establish a primary focus of integration at the municipal level.

d) **Rural Safety net**: safety nets are still needed, and South Africa is exceptional amongst developing countries in that many of the key programs of social assistance extend to rural people and prevent much hardship.

Fortunately, the MLM does not feature much levels of poverty due to the municipality's low population figures and great local and regional comparative advantages in agriculture and transportation (R59 transportation corridor). Consequently, these should be exploited, and the spatial development planning of the DM should take into consideration the following strategic pointers emerging from the ISRDS. These include:

Planning should aim for comprehensive regional development where urban settlements form an integral part of the strategy. Supporting a population development strategy that enhances the choices open to women, that constructively engages the youth in all communities and that provides for accessible health facilities and the possibility for lifelong learning.

Planning should ensure that levels of inequality in living standards and access to basic services between rural and urban areas are reduced. Importantly, the basic focus within rural areas should be to provide only the constitutionally mandated minimum level of services in a financially sustainable manner.

Supporting commercial farming and the exploitation of export markets for agriculture. Furthermore, the marginalisation of agriculture, particularly in the former homelands, needs to be addressed.
Creating markets for rural products and integrating markets through appropriate infrastructure investments:

- Exploiting areas of mineral potential in a sustainable manner.
- Promoting tourism that enhances and protects the natural environment.

- ***SEDIBENG GROWTH AND DEVELOPMENT STRATEGY (SGDS)***

Another important government initiative implemented during the past few years is the Sedibeng Growth and Development Strategy (PGDS) programme. Through the Provincial Growth and Development Strategies, the first generation SGDS was compiled within the parameters set by the National Spatial Development Perspective, as well as the Integrated Sustainable Rural Development Strategy as defined by national government.

A PGDS is a **"strategic and integrated provincial development plan that provides direction and scope for province-wide development programmes and projects,** within the context of a long-term perspective and taking into consideration resources available and constraints." Furthermore, a PGDS provides **"a spatially referenced framework for both public and private sector investment,** indicating areas of opportunity and development priorities and enabling intergovernmental alignment." In essence then, the Provincial Growth and Development Strategies are aimed at providing strategic directives to District and Local Municipalities in formulating their more detailed Integrated Development Plans (IDPs), and Spatial Development Frameworks (SDF).

It is thus essential that the issues and directives emanating from PGDSs' be compatible with the vision, priority areas, and guidelines of SDFs of local and district municipalities.

Strategy	Focus Area
Reinventing the Economy	Promote the establishment of manufacturing sector; Tourism and leisure; Residential Property Development; Agriculture; Green Sector; Role of Government;
Renewing our Communities	Change nature of Housing Delivery; Making Sedibeng attractive Concentrate public investment in identified nodes; Renew CBD's;
Reviving over Environment	Partnership to manage the environment; Initiatives to clean our water, land and air; Waste and recycling;
Reintegrating our Region	Improved Transport connectivity; Revitalization of corridors; Well developed logistical support to industry and business; ICT Connectivity; Integrated Residential development;
Releasing Human Potential	Local Partnership for education and training; Building Social capital; Promotion of BBBEE; Network of leaders;

- ***DEVELOPMENT PRINCIPLE***

The main principles which should underpin development in South Africa, as prescribed in Section 3 [1] of the Development Facilitation Act [DFA] [Act 67 of 1995], are as follows :

a) Promote the integration of the social, economic, institutional and physical aspects of land development.
b) Promote integrated land development in rural and urban areas in support of each other.
c) Promote the availability of residential and employment opportunities in close proximity to or integrated with each other.
d) Optimise the use of existing resources, including resources relating to agriculture, land, minerals, bulk infrastructure, roads, transportation, social facilities, etc.
e) Promote the development of diverse combinations of land uses, also at a detail level.

f) Discourage the phenomenon of "urban sprawl" and promote the development of more compact towns.
g) Promote the correction of the historically distorted spatial patterns of settlement in South African towns and cities.
h) Promote environmentally sustainable land development practices and processes.
i) Promote the establishment of viable communities.

The national Land Use Management Bill of South Africa [30 March 2001] prescribes 5 "directive principles" in Chapter 2, which can be summarized as follows:

Sustainability – sustainable management and use of the resources making up the natural and built environment.

Equality – everyone affected by spatial planning, land use management and land development processes and decisions should enjoy equal protection and benefits and no one should be subjected to unfair discrimination.

Efficiency – the optimum development results should be achieved with the minimum consumption of resources.

Integration – the separate and diverse elements involved in spatial planning, land use management and land development should be combined and co-ordinated into a more complete and harmonious whole.

Fair and good governance – spatial planning, land use management and land development should be democratic, participatory and legitimate in nature.

The Gauteng Planning and Development Act, No. 3 of 2003, lists a number of principles to promote spatial restructuring and sustainable development, *inter alia* the following:

a) Promote compact urban development, limit urban sprawl and protect agricultural resources.
b) Support the correction of historically distorted spatial development patterns.
c) Promote integrated urban and rural development in support of each other.
d) Optimize the use of existing resources.
e) Promote the establishment of viable communities.
f) Balance environmental considerations and economic imperatives.
g) Ensure the safe utilization of land.

The above DFA, Land Use Management Bill and Gauteng Planning and Development Act principles provide the broad policy framework of national and provincial government within which local authorities have to conduct their day-to-day affairs and development initiatives. The fundamental, underlying principle is the promotion of sustainable development, i.e. finding a balance between the natural, social and economic environment. This definition is also in line with the Local Agenda 21 principles.

1.3 STUDY OBJECTIVES

With due regard to the abovementioned legal framework the study objectives can be summarized as follows:

- to compile a Spatial Development Framework for the Midvaal Local Municipality as contemplated in section 26 of the Municipal Systems Act;
- to address all the contents of an Integrated Development Plan as required in terms of Government Gazette No. 22605;
- to adhere to all the Development Principles as stipulated in the relevant national provincial legislation; and
- to incorporate strategic provincial and national initiatives which fall within the Sedibeng District area into the SDF.

1.4 STUDY METHODOLOGY AND PROCESS

1.4.1 PLANNING PHILOSOPHY AND APPROACH

The planning methodology for this project was underpinned by the following principles :

- **Systems Approach to Problem Solving**

A systematic approach was followed during the study, starting with the synthesis and analysis of existing elements, followed by the identification and evaluation of alternative courses of action and ending with the refinement of the desired or optimum course of action to be followed.

- **Integrated Planning**

Urban Development is a diverse process with many elements or aspects, each of which impacts on all the others in many ways. Sensible interventions into the urban dynamics of a complex region such as Sedibeng cannot be made by addressing specific elements in isolation, and an integrated, holistic approach is therefore of the utmost importance. Throughout the duration of the project an inter-sectoral approach was followed.

- **Congruency with Broader Policies**

Not only should the District SDF strive towards achieving broader policies, such as the principles listed in the DFA, and also be co-ordinated with other policies and plans which are currently operational in the province, but it should also facilitate the adjustment of local spatial plans and policies.

- **Issue-related, practical and achievable proposals**

Proposals are directly aimed at solving existing problems or taking advantage of existing potentials. Proposals are practical and achievable within the framework of the financial and capacity constraints faced by the relevant authorities and should be linked to strategies/action plans for implementation.

- **Adherence to economic market principles**

The development policies and strategies are based on economic market principles and as such will lead to sustainable development over the long-term.

1.4.2 THE STUDY PROCESS

The process which was followed has been broken down into steps/phases as described below:

Step 1: Status Quo Investigation

The following aspects were investigated:

Existing situation in and surrounding the study area:

- broad land use pattern;
- major movement patterns [transportation];
- physical development features and constraints, including geology;
- major infrastructure;
- environmental scan; and
- socio-economic and economic profiles.

Specific attention was given to determining the developability of vacant land parcels for future infill-development.

Overview and contextualizing of provincial planning policy pertaining to the study area, e.g. GSDF, GUE, GOSP, etc.
Overview of other existing planning policies, strategies and guidelines in and surrounding the study area, e.g. the local SDF's.

Overview of the relevant IDP sectoral strategies and development programmes (both District and Local) and spatially contextualizing them.

Overview of development trends in the sub-region and major projects in the pipeline.

Although this phase involved primarily desk-top research, some primary research was undertaken.

Step 2: Situational Analysis

The main problems, opportunities constraints and issues which will impact on future development in the study area were identified.

The relevancy/applicability of the existing district and local municipality SDF proposals were assessed against the current reality.

Step 3. Development Framework

With due regard to the findings of Steps 1 and 2 above, a broad Development Framework was drawn up to guide detail land use proposals.

Step 4: Formulating Guidelines and Strategy for Implementation

During this phase the Development Framework which was formulated during the preceding phase was refined into more detailed guidelines for implementation and land use and development control.

This will serve as the basis for future land use and spatial planning and for the Land Use Schemes that have to be undertaken by the local municipalities in the District.

The Midvaal Local Municipality's 2010/2011 SDF was compiled using the directives stipulated in the Government Gazette No. 22605:

a) to **give effect to the principles of land development** as contained in chapter 1 of the Development Facilitation Act (Act 67 of 1995);

b) to **set out objectives** that reflect the desired spatial form of the municipality;

c) to **contain strategies and policies** regarding the manner in which to achieve the objectives referred to above, which strategies and policies must:

d) indicate **desired patterns of land use** within the municipality;

e) address the **spatial reconstruction of the municipality**; and

f) **provide strategic guidance** in respect of the location and nature of development within the municipality

g) to set out **basic guidelines for a land use management system** in the municipality;

h) to set out a **capital investment framework** for the municipality's development programmes;

i) to contain a **strategic assessment of the environmental impact** of the spatial development framework;

j) to **identify programmes and projects** for the development of land within the municipality;

k) to be **aligned with the Spatial Development Frameworks reflected** in the Integrated Development Plans of **neighbouring municipalities**; and

l) to provide a **visual representation of the desired spatial form** of the municipality, which representation:

i. will indicate where **public and private land development** and **infrastructure investment** should take place,

ii. will indicate **desired or undesired utilisation of space** in a particular area,

iii. will **delineate the urban area**,

iv. will identify **areas where strategic intervention is required**; and

v. will indicate **areas where priority spending is required**.

These aspects above form the essence of the principles promoted by the Development Facilitation Act, 67 of 1995 and Municipal Systems Act, 32 of 2000 and would result in a radical change as far as the mechanisms pertaining to land use management and land use applications are concerned.

From the above it becomes evident then, that development in South Africa is guided and directed by a wide range of legislation, policies and plans. Although these operate at various levels (i.e. national, provincial, and local), they share a common vision and purpose – integrated and sustainable development.

The major impetus (apart from addressing the distortions created by apartheid) for the first round of SDFs completed, was to comply with the legislative requirements presented by the Municipal Systems Act. Yet, to ensure that development does in actual fact take place in an integrated and sustainable manner, the Integrated Development Plans (IDPs) and Spatial Development Frameworks (SDFs) of local and district authorities, have to be aligned with the goals and directives provided by the various existing and new guiding documents.

This implies that IDPs and SDFs need to be reviewed on a continual basis to ensure synergy between the three spheres of government – i.e. what happens on local level needs to “fit-in” and “contribute” to both provincial and national development goals and priorities.

Consequently, and apart from legislative requirements, the Sedibeng District Municipality (SDM) has initiated a process to review the District’s existing SDF in light of new policy directives presented by documents such as the National Spatial Development Perspective (NSDP) and the Sedibeng Growth and Development Strategy (SGDS).

This document then, represents the reviewed SDF of the Midvaal Local Municipality as a component of the Municipality’s IDP as part of the district-wide SDF review in line with the IDP.

CHAPTER 2: SITUATIONAL ANALYSIS

2.1 INTRODUCTION

2.1.1 SEDIBENG DM - SPATIAL DEVELOPMENT OBJECTIVES

During the district's situational analysis, it was discovered that Sedibeng District has promoted and achieved the following objectives:

- Formalize and Protect a District Wide, Linked Open Space System.
- Promote a System of Functionally Defined Activity Nodes/Areas.
- Optimize Linkages and Connectivity.
- Strengthen Existing Urban Areas and Nodes.
- Maximize Existing Major Development Opportunities.
- Promote Densification along Main Public Transport Links.

2.2 MIDVAAL - STATUS QUO

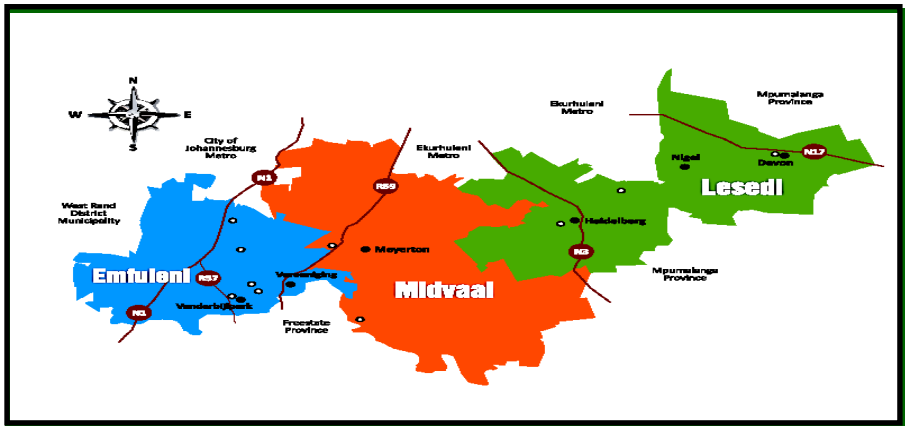
2.2.1 MIDVAAL LM & LOCAILTY

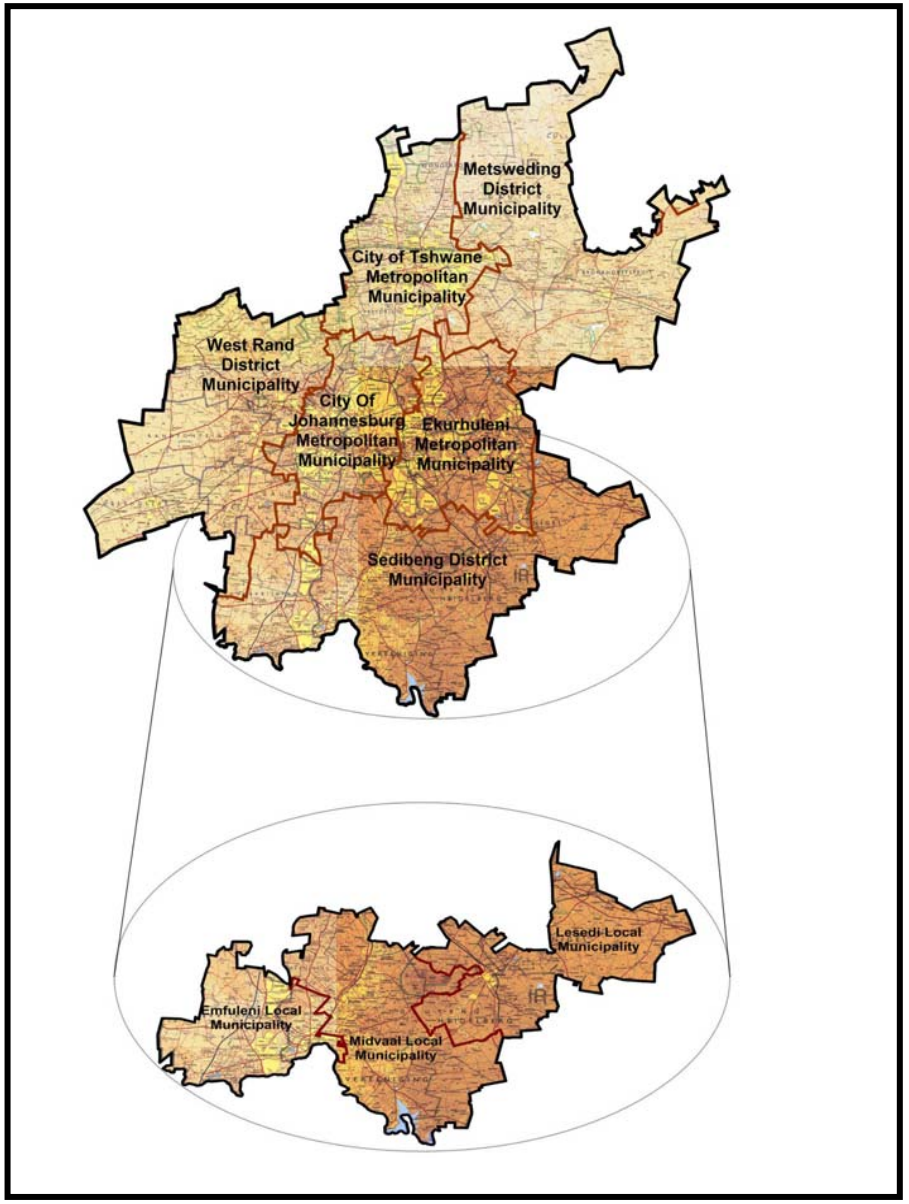
The Midvaal Local Municipality (GT422) is one of three local municipalities situated within the Sedibeng District Municipality, the other two being the Emfuleni (GT421) and Lesedi Local Municipalities (GT423).

Midvaal local Municipality is a Category B municipality as defined in the Municipal Structure Act.

Midvaal Local Municipality is located in the southern parts of Gauteng Province and is bordered by two provinces, namely the Mpumalanga Province to the east and the Free State Province to the south.

The Dipaliseng Local Municipality (MP306) is located to the east of Midvaal and the Metsimaholo Local Municipality (FS204) lies to the south. The City of Johannesburg Metropolitan Municipality and Ekurhuleni Metropolitan Municipality are situated to the north.





2.2.1.1 MIDVAAL LOCAL MUNICIPALITY AREA OF EXTENT

The total geographical area of the Midvaal Local Municipality measures 1.728 square kilometres (km). Midvaal LM is one of three municipalities situated within the Sedibeng District Municipality.

Sedibeng DM measures 4,185 square kilometres, whereby Midvaal LM makes up 41,29% of the total area of the Sedibeng District Municipality.

	Sedibeng District Municipality	Emfuleni Local Municipality	Midvaal Local Municipality	Lesedi Local Municipality
km²	4,185	968	1,728	1,489

Total size of geographical area

(Source: Global Insight, 2009)

2.2.2 ENVIRONMENTAL

2.2.2.1 ENVIRONMENTAL MANAGEMENT

The Midvaal Local municipality area has faced a significant human activity sprawl in the northern part associated with industrial development and associated urban development and sprawl. Such activities relatively have a huge negative impact on the natural unspoilt environment of the region. The local authority acknowledges that, while development is vital for the economic well-being of the area, maintaining an environment that is natural and

ecologically sound is vital for the social well-being of the communities in the area.

Water bodies will be managed to maintain the natural habitats of vertebrates and invertebrates by preserving an adequate buffer zone around them in line with the requirements of the DWAF and the GDARD. Pollution will be monitored on a regular basis and pollution sources will be managed in conjunction with the DWAF and the GDARD. Natural floodplains and water courses will be protected and any development in the vicinity of the rivers and water bodies in the area will be assessed in terms of the relevant legislation and regulations of the DWAF and the GDARD.

The MLM area is also largely characterised by Category I and II Ridges which have been identified by the GDARD as ridges requiring special attention. Any proposed development activities in the vicinity of areas with ridges will be assessed in terms of the GDARD's Ridges Policy.

The Strategic Environmental Management Plan (SEMP) is the product of the integration of the baseline information layers as contained in the Status Quo section of this report, after assessing it in terms of current policies and consultations with key stakeholders. During this stage of the process baseline information was transformed into secondary information that attaches value to different features which culminated in Environmental Control Zones (ECZs).

The main purpose of the Strategic Environmental Management Plan (SEMP) is to establish control zones, which indicate the environmental suitability of certain land parcels to accommodate various types of land uses or activities. The SEMP is not prescriptive in terms of land use and does not indicate which land uses must occur in which zones. Rather, the SEMP indicates specific minimum environmental requirements, through management parameters, which have to be met satisfactorily before approval of a development application could be considered. Similarly the SEMP indicates the level of assessment expected and required in the specified zone(s). The SEMP should also be used as the environmental input for the further review and development of the IDP and SDF processes.

The SEMP serves to provide guidance in terms of satisfying the requirements of the environmental management mandates of GDARD and the MLM, while it does not impose land uses on the planning mandate of the MLM.

The most significant constraints for development in the area include:

- The occurrence of Nature Reserves, specifically the Suikerbosrand Nature Reserve;
- Significant natural open space connectors;
- Several established conservancies in the area;
- The occurrence of Category I and Category II Ridges;
- Occurrence of large areas of medium and high potential agricultural land;
- Potential pollution sources from local and regional industrial activities, waste facilities, mining activities and irrigation agriculture;
- Constraints to development due to the position of the urban edge; and
- Development activities in the Vaal Dam Area.

There are clear indications from all sectors in the study area that there is a significant demand for development land, especially along the R59 freeway and the southern part of the study area, at the Vaal Dam, lying in an area bound by the R54 and R549.

Population growth over the last few years has been rapid and the high growth rates are expected to continue for a significant period. The provision of low cost / low-income housing is therefore a critical factor in the immediate future growth and development of the area. The identification of suitable land for low cost housing, which takes the principles of long-term sustainability into account, is a great challenge that has to be met by the authorities.

2.2.2.2 SOER: DISTRICT WIDE ENVIRONMENTAL CONCERNS

State of Environment Reporting (SoER) provides information on the current state of the environment, what is causing environmental change, and what is being done about it. The aim is to improve understanding of environmental issues and to give guidelines for sound environmental management. The following environmental concerns have been identified by, and extracted from the Gauteng State of the Environment Report (2003), and should inform the development of an SDF for the MLM includes:

The natural areas in the northern portion of the MLM have been significantly altered by human activities, industrial development and associated urban development and sprawl. However, the natural unspoilt areas are still existent in relatively pristine states and cover a significant portion of the MLM.

2.2.3. NATURAL ENVIRONMENT

2.2.3.1 CLIMATE

The climate of Midvaal is characteristic of the Highveld. It has warm summers with showers and thunderstorms commonly occurring in the late afternoon with rainfalls that vary between 700mm and 800mm. The area's Highveld climate contributes positively towards the increase of its agricultural and tourism potential. The winters are cool and dry.

2.2.3.2 ATMOSPHERE

Air pollution is a major concern as a result of Midvaal's locality in southern Gauteng. Midvaal is situated south of the mining belt in Johannesburg, which results in dust being blown over the area from the mining activities. Further causes of air pollution are the industries situated in Johannesburg, the East Rand and within the Sedibeng District, as well as smoke from open fires.

An Environmental Management Plan for the Midvaal Local Municipality was formulated in conjunction with Gauteng Department Agriculture and Rural Development (GDARD previously known as Gauteng Department of Agricultural, Conservation and Environment (GDACE)). The Environmental Management Plan for Midvaal was approved and is currently being implemented.

2.2.3.3. TOPOGRAPHY

Sedibeng District's topography is gentle with the elevation above sea level varying from 1500m to over 1800m at the top of the Suikerbosrand which is the highest point in Gauteng. The major topographical highest points in the east and north of the districts are the Ventersdorp lavas and Witwatersrand quartzite. The gentle slopes make it possible to develop an integrated, cost-effective urban environment.

The topographical features provide the potential for the introduction of passive recreational activities. The ridges are considered environmentally sensitive and any new development should be carefully considered.

2.2.3.4 HYDROLOGY AND DRAINAGE

The Midvaal area is located south of the sub-continental divide (viz. the Witwatersrand Ridge). Rain falling on the southern part of the divide, flows via the Vaal River into the Atlantic Ocean, while rain falling north of the divide flows via the Jukskei and Crocodile Rivers into the Indian Ocean.

The Vaal River Basin is the main hydrological system in the Sedibeng region and the tributaries of this river are non-perennial as a result of the dry weather in the area. The Vaal Dam is presently the most important source of water in Gauteng and has a water capacity of 2 536 million cubic metres. It supplies the mining, industrial, agricultural and other activity sectors in the region and in Gauteng as far as Rustenburg.

A problem facing the hydrological system is the polluting of the water from urban and industrial run-off.

The Klip River is an important feature, landscaping the Midvaal area and currently provides a habitat for birds and small animals. The river course could also be used for various recreational activities and tourist attractions if developed in a sustainable and responsible manner.
At present the quality of the water is a major concern as:

- Three municipal sewerage effluent plants as well as ERWAT dispose water into the river;
- Water from the outflows from stormwater systems is disposed into the river;
- The outflow from sewerage works also disposes into the river; and
- The spilage of sewerage into the system.

This significantly increases the flow rate of the river and leads to the erosion of riverbanks, canalization, loss of surrounding wetlands and a reduction in the retention period in reed beds and wetlands necessary for purification.

People use the river as a source of water and recreation. Quality checks on the water are only done on request if someone reports foul odours, dead fish or other concerns. This could cause a major problem and may even lead to a cholera problem. A management system for the Klip River needs to be formulated and implemented.

2.2.3.5 FAUNA AND FLORA

The region falls within the Grassland Biome, which covers the high central plateau of South Africa. Approximately one-third of the mammal species in South Africa occur in the biome.

Most of the area is covered by Cymbopogon Themeda Veld Type 48b, Northern Variation. Setaria grass species and Themeda and Eragrostis species dominate this veld type. Naturally occurring trees and shrubs are limited to specialised niches, such as riverine fringes.

The North-Eastern area is covered by Babenveld type 61b, which is underlain by the Venterdorp lava. This is a sour, unpalatable grassveld, which typically includes Trachypogon, Tristachaya, Setaria and Eragrostis grass species.

Trees and shrubs, such as Protea and Caffra, Acacia Caffra and Celtis Caffra African, are common along rocky hills and ridges.

No information is currently available on endangered species or biodiversity in the area.

2.2.3.6 SENSITIVE AREAS

The following information was received from the Gauteng Provincial Government : Gauteng Department Agriculture and Rural Development (GDARD) indicating the various sensitive areas located throughout the Midvaal area.

o ***Confirmed Red Data Species***

Red Data species have been identified and are considered to be endangered. The confirmed species are species that have been identified in the field and of which samples have been captured for reference and scientific purposes.

The specific specie may not be named for safety and conservational purposes.

Confirmed Red Data Species
Bird Species: Identified in the Suikerbosrand Nature Reserve.
Bullfrog Species: Identified in a small area in the northwestern region of Midvaal.
***Invertebrate Species*:** Small groups were identified throughout the Midvaal area. The biggest concentration was found in the Suikerbosrand Nature Reserve.
***Plant Species*:** A few scattered plant species were identified throughout Midvaal. The biggest concentrations occurring in the Suikerbosrand Nature Reserve and Vaal Marina (located adjacent to the Vaal Dam).

o ***Habitat Models***

The identified areas are considered to be suitable habitats for various plant, mammal and invertebrate species but have not yet been thoroughly investigated.

Habitat Models
Plant Habitat Model: An area was identified in the Suikerbosrand area as well as the Vaal Marina area.
Mammal Habitat Model: An area was identified in close proximity to the central western border of Midvaal.
Invertebrate Habitat Model: This area was identified in the northwestern “corner” of Midvaal.

o ***Ridges and Wetlands***

Wetlands occur on soil structures that are inundated with water for a significant period of time in a year. They occur along non-perennial rivers that are dry for a part of the year.

Ridges:	**Wetlands:**
Ridges are dispersed throughout the Midvaal area,	Several wetlands are found throughout the Midvaal area and are mostly located

mainly in a North-South direction.	along non-perennial rivers.

The ridges should be protected as part of the Open Space System as well as for potential archaeological finds. Historical sites exist in Gatsrand area just North of Midvaal.

The Klip River watercourse drains into the Vaal River, which is the main water source for Gauteng.

It is important therefore that the quality of the river is maintained and taken care of. The river also has tourism potential and is a habitat for various birds and small animals.

o ***Protected Areas***

This is a protected area that may be a nature reserve, bird sanctuary, or conservancy, or any other area that needs formal protection for their biodiversity.

The Suikerbosrand Nature Reserve has a formal nature reserve status and is thus protected by law. A few areas surrounding this Nature Reserve, with tourism potential, do not have any formal protection.

2.2.3.7 GEOLOGY

There are 3 distinct geological areas in Midvaal:

- **Timeball Hill Formation**. Pediment from granite covers the thick shale. Schale is not very permeable and limits the use of pit latrines in the area. The formation is known for its properties for brick making (an opportunity that should be further investigated).
- **Vryheid Formation**. This formation consists of sandstone and schale that erodes into clay.
- **Klipriversberg Group**. This is a sub-humid, dry zone implying that residual soils are formed during erosion with expansion possibilities.

There are numerous shallow and easily accessible coal deposits in this area that have been prospected but not yet mined. Most of the good coal deposits occur in the lower lying areas, but are limited in extent, therefore the prospect for a single large mine is remote.

The development of coal mining in this area depends almost entirely on sustained local demand from nearby power stations and weighing this option against the opportunity offered by the tourism industry, with a less significant impact on the natural environment.

The Midvaal area is also known for dolomite which restricts possible densification or intensifying of land uses.

THE CHALLENGE

The Environmental Management Plan is of great importance to protect the natural resources and wildlife in the area. All development to adhere to the Midvaal Environmental Management Plan, in order to protect the high potential farm areas.

2.2.3.8 CONSERVANCIES

- **WHAT IS A CONSERVANCY?**

A conservancy is a vehicle for community-based conservation. It is a registered, voluntary association of land-owners and land-users who decide to cooperatively manage their natural resources in an environmentally sustainable manner without necessarily changing the land-use of their properties.
(Community-based means communities within the conservancies and surrounding areas).

- **TYPES OF CONSERVANCIES**

Rural
Urban
School
Industrial
Informal Settlements

- **NATIONAL ASSOCIATION OF CONSERVANCIES OF SOUTH AFRICA NACSA**

The National Association of Conservancies of South Africa (NACSA) was established to:

- promote community-driven conservation nationally by supporting provincial conservancy associations
- Network with local and international bodies with similar aims.

NACSA's membership consists of two representatives from provincial conservancy associations plus co-opted members as needed.

Currently there are provincial conservancy associations in seven of the nine provinces. Through this network NACSA represents +-750 conservancies in South Africa. In total, these conservancies own and manage about 30 million hectares of land, five times what is in state-controlled conservation areas.

- **GAUTENG CONSERVANCY ASSOCIATION GCA**

The Gauteng Conservancy Association (GCA) was formed in February 2003 (in the Midvaal) to promote conservation on private property in Gauteng and to give "teeth" to efforts to protect Gauteng's fast-disappearing greenbelt areas. It is an independent body recognised by the Gauteng Department of Agriculture and Rural Development (GDARD). The GCA registers Conservancies on behalf of GDACE in Gauteng.

Conservancies have to deal with a multitude of problems: illegal mining activities, dumping of refuse, overgrazing, veldfires, game poaching, ill-planned Golfing estates, theft of plants and rocks, tree-cutting, alien vegetation - to name a few.

The momentum that the GCA has created is a sign that people at grassroots level need to network and support one another. The concept has moved way beyond the old idea of conservation as putting up a fence, putting in game and (preferably) removing people out of the equation.

We see it as community-driven conservation - people working towards protecting, conserving, restoring and growing whatever is valuable in their own neighbourhood.
The GCA received the Mail and Guardian Greening the Future Merit Award for Environmental Best Practice in the Not-for-Profit Organization Category in 2005.

It also received the NACSA Aardvark Gold Award for best environmental practice in a province in South Africa 2006

- **HERITAGE SITES**

It is important to mention here that heritage sites have been identified within the conservancies of the Midvaal and are being monitored by them. As mentioned in the NACSA constitution conservancies are not there to only conserve our natural resources but also the heritage of all the people of South Africa.

- **IMPORTANCE OF GRASSLANDS (THE DOMINANT HABITAT IN MIDVAAL)**

As Midvaal is predominately a grassland habitat it is important to ensure that they are recognised and protected. There is a wide misconception that grasslands are less important, ecologically than forests or indeed single trees!

Primary grasslands have become an endangered habitat through irresponsible property development and lack of proper land management. Our primary grasslands (that is, grasslands that have never been subject to any soil disturbance such as excavation, ploughing or soil erosion) carry relatively high to very high biodiversity, and often include rare, vulnerable or endangered species of both flora and fauna. Up to 80% of South Africa's grasslands have already been irreversibly transformed by forestry, agriculture and urban development. Less than 2% of the remaining 20% is under formal protection! It is within this context that we must manage these diminishing habitats responsibly and sustainably.

- **CONSERVANCIES IN THE MIDVAAL**

There are Eight Registered Conservancies situated in the Midvaal (Refer to the Spatial Development Farmework for details).

Our aim is to have green belts running from North to South and East to West in the Midvaal or at most to form conservancies in areas where the *GDACE conservation* has recognized important and irreplaceable sites.

HENLEY-ON-KLIP		
Establishment	**Size**	**Type**
06 September 1998	6894.2 hectares	Rural/Urban
Conservation Status	Irreplaceable sites in the South and West and important sites in the east bordering on Suikerbosrand Nature Reserve by *GDACE Conservation plan 2*	
Objective	The Klip River is a major concern as it has been recognised as one of South Africa's most polluted rivers. The Conservancy monitors water quality and regularly performs river clean-ups	

THORNTREE		
Establishment	**Size**	**Type**
01 April 1999	4571.68 hectares	Rural
Conservation Status	More than 50% of this conservancy has been recognised as important and irreplaceable by GDACE *Conservation plan 2*	
Objective	Thorntree Conservancy was established to look after the environmentally sensitive areas such as koppies situated in the middle of the conservancy which have been declared irreplaceable sites by the GDACE conservation plan 2. The conservancy monitors red data plants and invertebrates, and the Walkerville/ DeDeur landfill site on a regular basis.	
Achievements	Thorntree Conservancy received: The Meerkat Award for Best Overall Performing Conservancy in Gauteng in 2004 and 2005; The EWT Gold award for Best Biodiversity practice in a Gauteng Conservancy in 2006, and The Mail and Guardian Greening the Future Merit Award for Environmental Practice in the Not-for-Profit Organisation Category in 2006	

APPLE ORCHARDS		
Establishment	**Size**	**Type**
12 October 2002	**1417.2 hectares**	**Rural**
Conservation Status	A few important sites in the north of the Conservancy were recognised by *GDACE Conservation plan 2*	
Objective	The community of Apple Orchards, are recording data on indigenous plants and animals, as well as information of the challenges facing the human inhabitants of the Conservancy.	
Achievement	The Conservancy acts as an educative forum by being a channel for the acquisition and dissemination of environment-related information. It informs and educates local residents about living in ecologically sustainable ways, incorporating identification of environmental problems and the possible solutions to those problems	

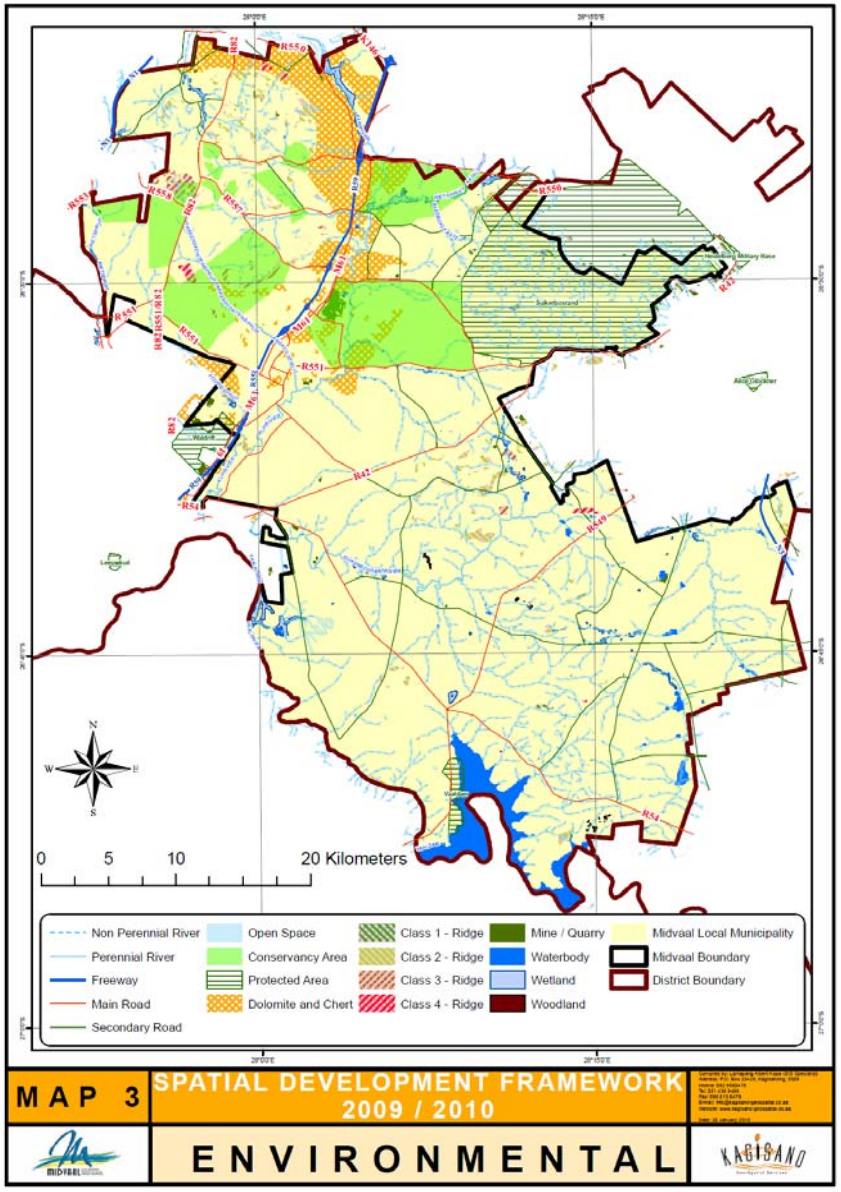
KLIPRIVIER SUIKERBOSCHRAND		
Establishment	**Size**	**Type**
01 March 2003	**2949.86 hectares**	**Rural**
Conservation Status	Most of the area in this conservancy has been recognised as irreplaceable sites by GDACE *Conservancy Plan 2.* It borders the Suikerbosrand Nature Reserve and has two rivers running through it, namely the Klip river and the Rietspruit. Regular rivers cleansups are run by the community.	

TSWELOPELE		
Establishment	**Size**	**Type**
18 June 2005	**No information available at present**	**Informal Settlements**
Conservancy Status (None)	This Conservancy was established by a few residents of Sicelo Shiceka west Meyerton. They have realised the importance of their environment and have planted trees and limit the number of dogs to attract wildlife (birds and mammals) back to the area. Many vegetable gardens have appeared. In May 2006 the conservancy received a certificate of the merit from Wilger Veld and Youth for their efforts.	

WELVERDIEND TRIANGLE		
Establishment	**Size**	**Type**
25 November 2005	**1499.95 hectares**	**Rural**
Conservation Status	This whole conservancy has been declared an important site by *GDACE Conservation Plan 2*	
Objective	This conservancy is situated south of the Suikerbosrand Nature Reserve and consists conservation has shown great enthusiasm in protecting this area.	
Achievement	The conservancy received a Silver Award for Conservation from the GCA in May 2006	

KLIPKRAAL		
Establishment	**Size**	**Type**
9 January 2006	**4200.00 hectares**	**Rural**
Conservation Status	This conservancy is situated north-east of the Vaal Dam. It is a very important tourism site. They have hiking trails through unspoilt grassland and koppies. Educational institutions have used these conservancies in Gauteng and have grown one member to five members in this short time.	

DRUMBLADE		
Establishment	**Size**	**Type**
To be confirmed	**To be confirmed**	**Rural**
Conservation Status	This conservancy is situated north-east of Ohenimuri, west of the farm Waterval 150-IR.	



2.2.4 ENVIRONMENTAL HEALTH MANAGEMENT

Environmental quality has been an ongoing concern in the Midvaal Local Municipality for a number of years. In terms of the District Growth and Development Strategy through the pillar of "Reviving Our Environment" finally gives the Midvaal Local Municipality the means to comprehensively address this issue and ensure that its citizens live in an environment that supports a positive quality of life for them, their children and future generations.

The EPoA identified three priority areas for intervention to address major environmental challenges namely: only 3 are mentioned i.e. water, waste and air quality.

- **WATER POLLUTION**

Sedibeng including Midvaal LM is faced with serious water pollution challenges in river systems and water bodies, notably the Kliprivier and Blesbokspruit which are polluted from runoffs from industrial areas, townships and waste water treatment works.

The Kliprivier is one of the most polluted rivers in the Sedibeng District as a result of mining and industrial activities in the upper catchments, outside the borders of the Sedibeng. (Source: Strategic Environmental Focus 2008).

The state of Midvaal LM's surface and ground water quality is influenced by activities within and beyond the boundaries of Midvaal LM. External pressures,

emanating from mining and industrial activities on the East Rand (Germiston, Boksburg, Brakpan and Springs), are major contributing factors to the current state of surface and ground water quality in Midvaal area.

The largest internal pressures are limited to the industrialised and urban areas in Meyerton. Rural areas in Midvaal where agricultural activities dominate, have a lesser, but nonetheless important, influence on the surface and ground water quality.

- **WASTE**

Sedibeng's history with regards to waste management is not that different to the South African situation in general. The issue of waste as with most local, provincial and national departments has many facets including economical, physical, social and political.

Waste management has traditionally taken place on an ad-hoc basis to meet the current needs, with very little foresight into the future needs of an ever-increasing population. Identification of landfill sites has generally taken the form of unplanned site location with little or no thought of design to reduce potential impacts to the environment, neighbouring communities, etc.

With the development of the minimum requirements by the Department of Water Affairs and Forestry (DWAF) for waste disposal by landfill the identification of landfill sites now take a much more pro-active approach in reducing further negative consequences related to an activity such as planning and design.

Local authorities in Sedibeng have indicated that they have neither sufficient funding nor adequate trained staff, to effectively plan and execute their waste management functions in a sustainable manner.

Communities have also not been involved in the identification of the landfills, which has resulted in community resistance and/or limited support. The level of services varied by area and in particular the previously disadvantaged areas have been left without proper waste management services.

- **AIR QUALITY**

Sedibeng District Municipality is generally characterized by poor air quality, particularly within the Emfuleni and Midvaal Municipalities. A series of studies undertaken over the years have clearly indicated the negative impact of pollution on the health of people living and working in the area. As a result the Vaal area (including Emfuleni and Midvaal) was declared a Priority Area in terms of the National Environmental Management: Air Quality Act in 2006.

The proposed Highveld Priority Area will include Lesedi along with areas of Mpumalanga, effectively making the whole Sedibeng region a priority area in terms of known ambient air quality problems. Recent data from Department of Environmental Affairs and Tourism's (DEAT) air quality monitoring stations in

the Vaal shows particulate matter as being the key problem, with levels well over international standards. (Source: EPoA Version 0.2, 2nd October 2007).

2.2.5 MAJOR PROVINCIAL AND ARTERIAL ROADS (DEVELOPMENT CORRIDORS)

The Midvaal Local Municipality has an extensive road network at both the national and regional level, including the R59 and the R82, which traverse the district and connect with the Ekurhuleni and City of Johannesburg Metropolitan areas. All major routes are predominantly on a North-South axis and tend to converge on the City of Johannesburg. Regional main roads operating on a district tend to radiate out from or converge on the commercial centres of Meyerton. The R42 provides the main East-West linkage across the district.

The following identified roads provide important linkages and should be optimized to link historically disadvantaged communities to areas of major employment.

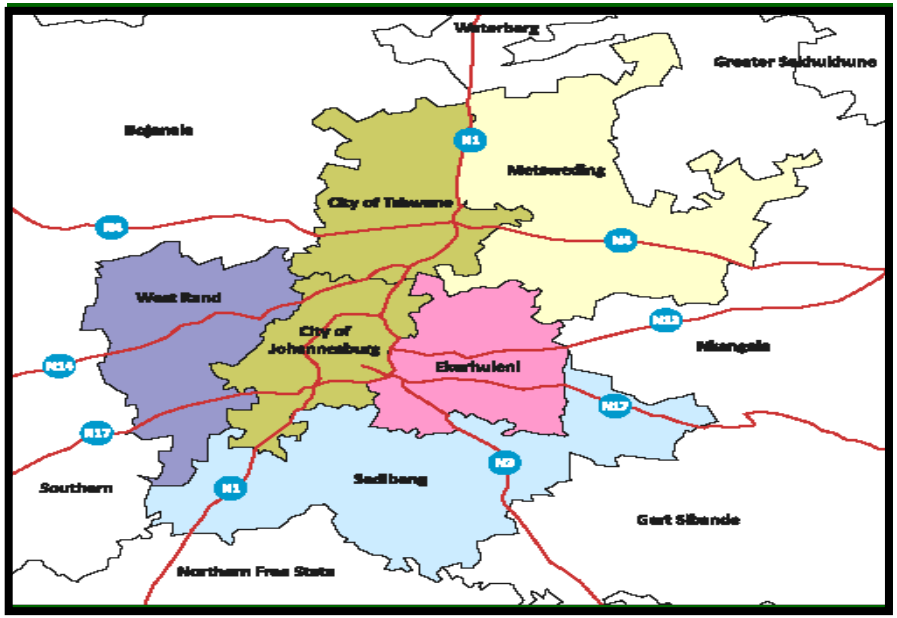
These include:

Provincial Route R42 – this is the main East-West linkage through the Midvaal LM, stretching from the N1 at Loch Vaal in the South-West through Vanderbijlpark, Vereeniging, Heidelberg, and Nigel to Vischkuil/Endicott in the North-East onwards towards Delmas in Mpumalanga.

Provincial Route R59 – the main North-South linkage through the Midvaal LM area, linking Vereeniging/Vanderbijlpark with Meyerton and northwards towards Alberton in Ekurhuleni.

Provincial Route R82 – a secondary North-South link, linking Vereeniging with De Deur and Walkerville and Johannesburg towards the North.

Provincial Route R54 – the main link between Sebokeng, Vereeniging and Vaal Marina in the South.



2.2.6 SPATIAL COMPOSITION AND LAND USES

The main land use within the Midvaal Local Municipality is briefly discussed hereunder.

- **PROCLAIMED TOWNS**

The table below indicate proclaimed town within the Midvaal LM area of jurisdiction, which include Residential, Industrial and Commercial Townships.

TOWNSHIPS		
De Deur Estates	Henley-on-Klip	Risiville
Duncanville X3	Lakeside Estates	Risiville X2
Eikenhof (portion)	Mamello	Riversdale
Eye of Africa	Meydustria	Rothdene
Golfpark	Meydustria X2	Sybrand van Niekerkpark
Highbury	Noldick	Sicelo
Highbury X1	Noldick X1	Vaal Marina
Klipriviersdorp (Kookrus)	Ohenimuri	Vaalview Settlements
Klipwater	Randvaal X1	Witkop Industrial
Meyerton	Meyerton Small Farms	Witkop (Daleside)
Meyerton X1, 2, 3, 4, 6		

- **URBAN RESIDENTIAL AREAS**

Residential land use includes both formal and informal residential townships. The defined residential areas within Midvaal LM include: Risiville and extensions, Kliprivier, Riverdale, Golfpark and extensions, Meyerton and its extensions and Henley-on-Klip, which are all situated along the Eastern side of the R59 freeway. Some informal settlements occur along the Western side of the R59 freeway in Midvaal. In view of the above, it is submitted that the majority of new housing developments within the Midvaal LM area over the short to medium term will be subsidy-linked housing schemes initiated with state funding – private sector housing development will play an insignificant role in respect of generating additional infrastructural and community services demands. A possible mix use / residential development located on the North Western part of Midvaal LM area of jurisdiction (Doornkuil) which consist of ±20 000 residential houses (Credit Link and Bonded houses) and associated business properties will contribute to the existing residential fabric of Midvaal.

- **INDUSTRIAL/COMMERCIAL DEVELOPMENT**

There is corridor of industrial activity along the R59 from Kliprivier to the Meydustria area. The most important industry in this area is Samancor. It must be noted that some of the industries in the Meyerton area are heavy/noxious industries and thus potentially have a high environmental impact on the residential areas in close proximity.

Commercial activities which can be defined as warehousing, distribution and transport businesses are found interspersed with industries in all the major industrial areas. An established industrial/commercial industry is Heineken Brewery along the R59 corridor, which is strategically located to boost job creation and employment opportunities in the Midvaal Local Municipality region. North of Heineken Brewery, a new Commercial Park (Klipriver Business Park) has been approved and is currently being developed. This Commercial Park is envisaged to be similar to that of Longmeadow Business Park (located in Modderfontein / Edenvale) and Linbro Business Park (situated north of Buccleuch) along the N3.

- **RETAIL/ BUSINESS (CBD)**

Retail/business is mostly concentrated in and around the existing Meyerton Central Business District of Meyerton, as well as some suburban / local supportive shopping centres. This land use makes out only ±1% of the total area of Midvaal local Municipality.

The CBD's of Midvaal show significant signs of urban decay, however during 2008/2009 and 2009/2010 the CBD phased upgrading project commenced, whereby Phase 1 (Truck Stop) located West of Meyer Street was completed in 2008 and Phase 2 (CBD Upgrade) along Loch Street between Meyer Street and Venton Street was completed in November 2009. Phases 3 and 4 will conclude the upgrading project (Phase 2-4 relates to the beautification of the CBD).

- **RURAL RESIDENTIAL (AGRICULTURAL SMALL HOLDINGS)**

The rural settlement pattern in the district is characterized by a large number of small holdings/small farms settlements ranging from 1 – 5 ha properties located around the fringes of the urban areas. Diverse land uses are found on the agricultural holdings, ranging from rural residential, through small scale farming to extensive, informal industrial and commercial activities. A relatively large proportion of the agricultural holdings are vacant.

AGRICULTURAL HOLDINGS AND OTHER SETTLEMENTS		
Blignautsrus A.H.	Hartzenbergfontein A.H.	Rissiville Small Farms
Blue Saddle Ranch	Helderstrome A.H.	Riverspark A.H.
Buyscelia A.H.	Homelands A.H.	Shermanpark A.H.
Botlonwold A.H.	Homestead Apple Orchards A.H.	Tedderfield A.H.
Cooperville A.H.	Ironside A.H.	Valley Settlements A.H.
Dardenvale A.H.	McKay Estates	Vanderwesthuizenshoogte A.H.
De Balmoral Estates A.H.	Mooilande	Vorsterpark A.H.
Drumblade A.H.	Nelsonia A.H.	Schoongezicht A.H.
Garthdale A.H.	New Kentucky A.H.	Walkers Fruit Farms A.H.
Golfview A.H.	Ophir A.H.	Walkerville A.H.
Gardenvale A.H.	Orchards A.H.	Glen Donald A/H
Hatzenberg A.H.	Pendale A.H.	Waterval A.H.

- **COMMERCIAL AGRICULTURE**

Commercial agriculture takes up the largest area within the Midvaal LM area. Agricultural activity in Midvaal LM area is dominated by large scale commercial farming operations [crop production including maize, grain, sorghum, wheat, soya and dry beans, ground nuts, sunflower seeds and vegetables, and animal production including milk, beef, mutton and lamb, eggs and poultry].

Midvaal LM is a very important resource to Gauteng in terms of food production, and the protection of Agricultural land should be taken into consideration in the spatial planning of the area.

The performance of the agricultural sector is very dependent on climatic conditions and may fluctuate from year to year. The agricultural sector does however present opportunities for downstream economic activities and job creation in terms of further processing of agricultural produce.

FARMS		
Allewynspoort 145 IR	Hartzenbergfontein 332 IQ	Slangfontein 372 IR
Badfontein 438 IR	Kafferskraal 464 IR	Slangfontein 374 IR
Brakfontein 425 IR	Kafferskraal 381 IR	Snowdown 387 IR
Blesboklaagte 181 IR	Keytersrust 380 IR	Sterkfontein 424 IR
Blesbokspruit 465 IR	Kleinfontein 446 IR	Stryfontein 477 IR
Boschkop 426 IR	Kliprivierwal 371 IR	Swartkoppies 143 IR
Boschkop 482 IR	Klipview 175 IR	Suikerbosrand 115

FARMS		
Brakfontein 425 IR	Kookfontein 545 IR	Tamboekiesfontein 173 IR
Braklaagte 370 IQ	Koolfontein 431 IR	Uitgevallen 432 IR
Bronkhorstfontein 329 IQ	Koppiesfontein 478 IR	Uitkyk 159 IR
Chrissiesfontein 305 IR	Koppiesfontein 422 IR	Uitvlucht 434 IR
Daleside 362 IR	Langkuil 363 IR	Vaalbank 476 IR
De Deur 539 IQ	Modderfontein 410 IR	Vaalview 486 IR
De Kuilen 460 IR	Mooilande 430 IR	Varkfontein 373 IQ
Diepkloof 182 IR	Muldersrus 330 IQ	Vasfontein 183 IR
Doornkuil 369 IQ	Nooitgedacht 176 IR	Vischgat 467 IR
Driefontein 146 IR	Nooitgedacht 177 IR	Vlakfontein 466 IR
Driemoeg 537 IQ	Orange Farm 371 IQ	Vlaklaagte 178 IR
Elandsfontein 334 IQ	Panfontein 437 IR	Vogelfontein 376 IR
Faraosfontein 372 IQ	Panvallei 469 IR	Waterval 150 IR
Goedgedacht 419 IR	Platkoppie 420 IR	Weltevreden 227 IR
Goedgedacht 443 IR	Rietfontein 621 IR	Welverdiend 379 IR
Goedverwachting 442 IR	Rietfontein 461 IR	Wildebeestfontein 356 IQ
Greenvalley 154 IR	Rietspruit 445 IR	Witkop 180 IR
Grootspruit 444 IR	Rietspruit 417 IR	Witkoppie 373 IR
Grootvlei 453 IR	Roodepoort 149 IR	Zoekfontein 468 IR
Hartebeesfontein 473 IR	Schoongesicht 378 IR	Zwartkopjes 143 IR

- **VACANT LAND**

The provincial eLand decision support system indicates that there is ±98000ha of developable vacant land situated in the Sedibeng District. ±4900ha of this developable vacant land is situated within the urban edge as currently demarcated by Gauteng Province. A more detailed vacant land audit was undertaken within the urban edge as part of the SDF exercise. The demarcated urban edge amounts to ±6220 ha for the whole of Sedibeng, of which 1085 ha [17,5%] is situated in Midvaal Local Municipality.

The Figures below indicate that there is enough vacant land within the current urban edge to accommodate substantial future urban development within the Midvaal Local Municipality. (Source: Sedibeng SDF 2009)

- **LAND COVER CATEGORIES**

The Table below illustrates the land cover categories by percentages of Sedibeng and the locals.

	Sedibeng District Municipality	Emfuleni Local Municipality	Midvaal Local Municipality	Lesedi Local Municipality
Forest and Woodland	0.0%	0.2%	0.0%	0.0%
Thicket & bushland (etc)	2.9%	1.6%	4.4%	1.9%
Unimproved grassland	51.9%	29.7%	62.7%	54.0%
Improved grassland	0.1%	0.3%	0.1%	0.1%
Forest plantations	0.8%	0.2%	1.0%	1.0%
Waterbodies	1.0%	0.4%	1.9%	0.3%
Wetlands	0.2%	0.0%	0.1%	0.5%
Cultivated: temporary - commercial irrigated	0.5%	1.0%	0.4%	0.4%
Cultivated: temporary - commercial dry land	31.6%	39.7%	20.4%	39.2%
Urban / built-up land: residential	3.1%	11.0%	0.7%	0.8%
Urban / built-up land: residential (small holdings: grassland)	6.2%	11.3%	7.5%	1.4%
Urban / built-up land: commercial	0.4%	1.3%	0.2%	0.0%

	Sedibeng District Municipality	Emfuleni Local Municipality	Midvaal Local Municipality	Lesedi Local Municipality
Urban / built-up land: industrial / transport	0.8%	2.9%	0.1%	0.1%
Mines & quarries	0.5%	0.4%	0.5%	0.5%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Land cover categories (Source: Global Insight, 2009)

CHAPTER 3: OPPERTUNITIES AND CONSTRAINS

The following key issues were identified per sector in terms of a SWOT Analysis (**S**trengths, **W**eaknesses, **O**pportunities and **T**hreats):

3.1 FINANCE AND INSTITUTIONAL SECTOR

STRENGTH

- Healthy financial state of the Midvaal Municipality
- Strong human resource and skills base of the Municipality

OPPORTUNITY

- To increase social spending - highest expenditure towards engineering services followed by social services.
- To extend and improve service delivery in the urban and rural areas.
- The income base of the Municipality can be increased.

WEAKNESS

- Primary source of income for Midvaal Municipality is sale of services – should ensure sustained income.
- The municipal by-laws are outdated and relevant to the former institutional entities
- The municipal offices are not accessible for physically disabled individuals

THREAT

- Budget is biased towards operational expenditure (83.8% operational budget: 16.2% capital budget) resulting in few capital projects.

3.2 SOCIO-ECONOMIC SECTOR

STRENGTH

- The slow population growth rate will relieve the need for housing and social facilities over the long term.

OPPORTUNITY

- Large pool of undeveloped potential workforce.

WEAKNESS

- A substantial portion of the population (64%), live in rural areas making service delivery very difficult.
- Low levels of socio-economic development in the rural areas, particularly in terms of literacy, education, primary health, early childhood development as well as adult basic education and training.

THREAT

- Large, young population (31%), which is indicative of future strain on services.
- Severe impact of HIV/AIDS on the population and specifically economically active component of the population
- The large dependency on the agricultural sector in the economy can be a threat when taking factors like droughts or floods in consideration.

3.3 INFRASTRUCTURE SECTOR

STRENGTH

- Good levels of engineering infrastructure in urban areas and high levels of access to basic services in urban areas.
- Good road network in the area – highways giving easy access to provinces and towns outside Midvaal's borders.

OPPORTUNITY

- R59 Development Corridor that should be developed in accordance with the R59 Development Corridor Strategy.

WEAKNESS

- Basic service infrastructure in rural areas and informal settlements around urban areas with poor access to services. Lack of funding for maintenance.
- Road Network classification study outstanding;

THREAT

- Insufficient infrastructure service capacity by increasing residential densities
- Approximately 3% of households do not have access to treated water.

3.4 SOCIAL SECTOR

STRENGTH

- Providing Multi Purpose Community Centres in the densely populated rural areas, to provide people with crucial social services required on a frequent basis.
- A comprehensive District Health Plan, concentrating particularly on HIV/AIDS is being implemented.

OPPORTUNITY

- Social development, by provision of additional Multi-Purpose Community facilities accessible to rural communities.
- Stimulate economic development through incentives such as tourism projects and local economic development.
- The establishment of the Oprah Winfrey Academy – South Africa. An international welfare figure has donated money for the establishment of this school. This will bring many opportunities for the girls who have the privilege of attending this Academy

WEAKNESS

- Social service backlogs, particularly in rural areas.
- Weak communication and cooperation systems between provincial departments and district/local municipalities, due to the fact that provincial service districts and regions do not correspond with local municipality boundaries.
- Lack of shelters/places of safety for people in distress and permanent accommodation for orphans.
- The lack of sport and recreational facilities in the marginalised townships and rural areas to meet basic requirements.

THREAT

- Unacceptable conditions at many schools in the area

3.5 ENVIRONMENTAL MANAGEMENT

STRENGTH

- Many natural features.
- Climate is suitable for agricultural and tourism potential.

OPPORTUNITY

- Many natural features, which can be immeasurable assets to the area if properly, utilised.
- Ridges with potential archaeological potential.
- The establishment of conservancies give the community the opportunity to take care of their environment.

WEAKNESS

- Limited information on environmental issues
- Inadequate waste disposal capacity leading to potential threat
- Weak environmental management at Provincial, District and Local Municipality level. DACEL focuses on small issues while the larger

environmental threats are ignored, e.g. allegations that asbestos products are disposed of at a dumping site in close proximity to homes near Everite.

THREAT

- Limited information on environmental issues
- Air pollution due to locality of the Midvaal area in the southern part of Gauteng
- Water pollution in rivers such as the Klip River
- Unlicensed waste disposal sites to pollute ground and surface water.
- Threat to the environment and resource thresholds caused by informal settlements with poor basic services
- High potential agricultural land posed by urban sprawl, subdivision of agricultural land, residential densification on agricultural land and informal settlements.
- Threat to open spaces caused by increasing development, densification and pollution.
- Threat to population and natural environment caused by air and water pollution from urban areas north of Midvaal.

3.6 PHYSICAL DEVELOPMENT

STRENGTH

- The existence of hierarchical nodes and road network within the Midvaal area, resulting in development planning accordingly.

OPPORTUNITY

- Opportunity in terms of R59 which could be used to develop a commercial / industrial activity zone/ corridor.
- The inclusion of urban areas into the Urban Edge will have many positive spin-offs for the surrounding communities.

WEAKNESS

- Land Use Policies outdated and needs to be reviewed and some new policies formulated.
- Poor living standards in rural areas, particularly in areas with high population concentrations.
- Poor assistance to marginalised and impoverished farming communities.
- Vast rural area to the south of Midvaal. Provision of services is hampered.
- Housing backlog.

THREAT

- Increasing population densities around Mamello and Sicelo without the basic services being in place.
- Threat of farm evictions and abandonment associated with illegal occupation, a shortage of running water, shack farming and a lack of law enforcement.

3.7 TOURISM

STRENGTH

- Numerous tourism activities and environmental features that stimulate tourism activities within the Midvaal area.

OPPORTUNITY

- The Midvaal area contains National Heritage sites.
- Opportunities for recreation and tourism offered by the natural environment, e.g. Vaal Dam, Klip Rivier, Bass Lake, Suikerbosrand Nature Reserve.
- Sedibeng DM is in the process of formulating a Regional Tourism Association which includes Midvaal LM area of jurisdiction.

WEAKNESS

- Further investigations have to be made with regards to new tourism opportunities and potential.
- No formal Tourism Association exists within the Midvaal Local Municipality's area of jurisdiction.

THREAT

- Development within environmental sensitive area may negatively impact on the environment if the area is not managed in terms of the Environmental Management Framework which will ensure the protection of the natural environment and tourism potential.

CHAPTER 4: SPATIAL DEVELOPMENT FRAMEWORK

4.1 INTRODUCTION

The Spatial Development Framework for Midvaal Local Municipality is a refinement of the Spatial Development Concept outlined in the Section above. The proposals attempt to create a broad framework within which existing development potentials in the area can be maximized and problems can be rectified.

The Spatial Development Framework for the Midvaal area is a visual representation of the Development Vision and Interventions required for achieving the Development Objectives. The Spatial Development Framework should not be interpreted as a blueprint or master plan aimed at controlling physical development, but rather the framework giving structure to an area while allowing it to grow and adapt to changing circumstances. The Spatial Development Framework needs to be closely read with the fundamentals, objectives, strategies, programmes, interventions and projects. Please refer to Map **1: Midvaal Spatial Development Framework** for more details.

The Spatial Development Framework indicates areas of existing development and proposed expansion for specific land uses, e.g. industrial development, institutional development, residential development etc. The Framework Plan indicates broad desirable land use categories and should be supplemented by a Land Use Management System to address land use management, densities, floor areas, height zones etc.

This plan should be seen as a framework aimed at promoting and guiding a development in accordance with the Vision and Fundamentals.

The following are considered as key issues to be addressed by the Spatial Development Framework:

- **Distorted urban form and structure – scattered location of settlements and population concentrations.**
- **Poor accessibility to social and economic activities for rural populations.**
- **Linear urban form with ribbon development along major roads, resulting in sprawl.**
- **Limited information on environmental issues. This also makes an assessment of the environmental impact of spatial development difficult.**
- **Informal settlements with high population densities and poor access to basic services. These settlements are not integrated into the urban fabric and are dormitory residential areas, with no supporting land uses.**
- **Under-utilisation of the railway network and inefficient public transport.**

4.2 DEVELOPMENT GUIDELINES

Spatial development, capital investment as well as public and private infrastructure investment should be in accordance with the Spatial Development Framework. In this regard, public and private investment should be focused on the optimal use of existing resources, as well as addressing service backlogs. In this regard, the projects put forward in terms of the IDP, indicated on the Project Plan, should enjoy highest priority in terms of public and private investment.

An integrated Land Use Management System should be implemented for the entire Midvaal area, to improve on the current situation of a multitude of Town Planning Schemes applicable to the area. The Land Use Management System should promote the objectives and strategies for spatial development set out in this section of the Integrated Development Plan.

Development / new development must be guided by the following guidelines:

- **Give effect to the implementation of the Urban Edge as put forward in terms of the Gauteng Spatial Development Framework.**
- **Protection of Open Spaces and Conservancies in line with the Midvaal Environmental Management Plan (Refer to full document);**
- **Protect rivers, wetlands, watercourses, drainage areas and areas of historical and cultural significance.**
- **Promote a strong transportation network;**
- **Promote Compact Urban Form;**
- **Promote the concentration of non-residential activities in nodes;**
- **Promote appropriate mixed land uses in nodes, even at the scale of individual erven;**
- **Promote appropriate mixed land uses within areas identified for mix use development, subject to the following criteria :**

  a) The surrounding area / existing developments must be taken into consideration;
  b) Availability of Infrastructure to support proposed land use / development;
  c) Compliment and support existing / approved / legal surrounding land uses;
  d) Must be compatible with surrounding developments / area and build form;
  e) Access to the satisfaction of the controlling authority;
  f) No or limited environmental impact on the area / surroundings;

- **Promote appropriate mixed land uses in the Economic Corridor along the R59;**

- **Protect the character and amenity of existing residential areas (urban and rural);**

- **Manage densification and infill in accordance with the above-mentioned measures or specific policies or framework plans for specific areas;**

- **Support for major development such as Doornkuil / Savanna City / Klipriver Business Park.**

4.3 URBAN EDGE

4.3.1 INTRODUCTION

The proposed urban edge is largely predicated on the provincially demarcated urban edge, with some modifications in certain areas. The provincial urban edge delineation process promotes and guides development of new areas within the municipalities.

The objective of the Urban Edge is to contain urban sprawl and focus on infill and densification, thereby maximizing the use of existing engineering infrastructure and the optimization of the existing transportation network.

The urban edge delineation process thus welcomes the opportunity to make proposals for a revised Urban Edge, which while continuing to limit urban sprawl and expansion also acknowledges developmental pressures of a growing economy and population.

The Sedibeng District Municipality, in conjunction with the Local Municipality of Midvaal LM annually submit one (1) joint proposal for the delineation of the Urban Edge. The proposal is based upon the approved Sedibeng District Municipality Spatial Development Framework, which is contained in the IDP 2007-2011.

The annual proposal of urban edge amendment is based on the following criteria:

- **CONSERVATION OF THE ENVIRONMENT**

The Municipality has environmental resources which can contribute to the promotion of tourism and related activities. The promotion of tourism should not be viewed to be in conflict with conservation, but rather as an asset to enhance the regional economy. However, environmental concerns will continue to be managed in terms of the relevant legislation and the EIA processes can suggest or ensure the relevant mitigation and conservation measures.

- **OPTIMAL UTILIZATION OF ENGINEERING SERVICES**

A number of areas where no/ limited bulk infrastructure exists have been identified for inclusion into the Urban Edge owing to the following reasons:

- To maximize the tourism potential along natural attributes;
- To acknowledge areas which have been subject to development pressure, where a number of applications have been approved by the respective Local Municipalities; and

- To minimize the effect of fragmented localized engineering solutions on developments at the periphery of the existing urban areas.

- **OPTIMIZATION OF PUBLIC TRANSPORT**

The Sedibeng SDF focuses development along the major transportation corridors of the N1, N3, and nodal areas along the N17 and R59 as well as inter-urban corridors (R54, R23, R28, R57, R103 and the R42) along which future integrated developments is proposed. With the inclusion of these corridors within the Urban Edge, it will facilitate and promote the optimization of public transport and densification along the corridors.

It is proposed that developments adjacent to corridors outside the Urban Edge be supported for tourism.

4.3.2 RE-ALIGNMENT OF THE 2010-2011 URBAN EDGE

The urban edge delineation process within Midvaal LM included the following:

The areas are Klipriver business development area, the Heineken Development, areas along the R59 (from Garthdale going South to Golfpark (In addition, it includes the Meyerton CBD (North to South). Also in the proposal, the extension proposes an extension North wards along Provincial Route R59 to include the whole area between Route R59 and the Klipriver.

The Spatial Development Framework proposes certain amendments to the alignment of the current Urban Edge due to the existing spatial development pattern of the Midvaal Area and much needed new development initiatives.
The amendments are as follows:

- To include Doornkuil – EIA and Township Establishment approved;
- To include the existing Towns : Riverdale and Kliprivier (Kookrus) Townships;

The amended urban development area includes the existing proclaimed townships of Kliprivier (Kookrus) and Riversdale, which are excluded from the provincial proposal. The proposed extension of the urban edge in these areas will ensure that sufficient land is available for future residential development in close proximity to the Meyerton CBD, which already has most of the social facilities and other urban amenities to cater for such development **(See Map 6: Midvaal Urban Edge Development Map).**

In line with the provincial guidelines, the Sedibeng District Council confirms that the urban edge can and may be amended in future as and where this may be required, based on the merit of the situation.

4.4 PROTECTION OF OPEN SPACE AND CONSERVATION AREAS

The Spatial Development Framework currently provides a conceptual representation of the Municipal Open Space System. Once the necessary planning exercises have been completed to identify the MOSS, the Spatial Development Framework should be updated to incorporate these exact areas. The MOSS will then be implemented through the Spatial Development Framework as well as policies and guidelines for the protection of these areas.

Currently, Sedibeng District Municipality is conducting a Regional Open Space System and it must be noted that a detailed strategic environmental assessment does not form part of this document. The results of this exercise will serve to enhance the detail pertaining to the regional open space system to be conserved and developed in the district in future. The open space system is predicated on the major watercourses, ridges and koppies and other natural features within the study area. All sites identified as irreplaceable in the GDARD Gauteng Conservation Plan must be accommodated in the primary open space system, with appropriate buffers and corridors.

The GDARD policy of buffer zones around ridges, water courses/bodies and other environmental features should be incorporated into the open space planning of the district. As far as rivers and wetlands are concerned, a minimum of 50-100m above the 1:100 year floodline is required as a buffer.

The Suikerbosrand Nature Reserve is a major nature reserve with a well developed tourism and recreational infrastructure. However, the reserve is under threat from urban sprawl. Low cost informal housing in the Katoorus area to the north in Ekurhuleni is having some impact on the immediate local environment. Reserves are protected by means of a buffer that consist of an open land or low intensity agricultural uses. The Suikerbosrand Nature Reserve and Vaal Dam should be protected and promoted through land uses that could attract further tourism to the area.

4.5 PROMOTION OF A STRONG MOVEMENT NETWORK

A strong movement network is required to create regional and local linkages and promote connectivity between nodes. The R59 is the most prominent road in the Midvaal area. This road should be promoted as an Economic Spine, with economic uses along the road, as well as the promotion of public transport and transport facilities along the road. The R59 should be promoted as a movement corridor within the Midvaal area and a link with surrounding nodes, service centres and tourism attractions.

The location of the R59, Morris Road and the railway line as parallel movement networks in close proximity to each other lends itself to corridor development; therefore the Economic Spine is promoted along this potential corridor. Ribbon development along other roads is however not promoted, as these impact on the mobility of the movement network. The R82 also provides for movement in the Western part of the area.

The Midvaal has two commuter rail lines, both running north-southwards, linking Vereeniging and Vereeniging towards Free State province with Johannesburg and Germiston.

As per the Global City region report, railway services should represent the core service around which public transport is provided. The existing railway lines are a permanent infrastructure and they will always present opportunities for transit orientated development.

Currently there are no extensions to the existing commuter rail system and services are foreseen at this stage, however the upgrading of stations and development of intermodal transport facilities should be promoted through economic development and transport plans.

4.6 PROMOTION OF COMPACT URBAN FORM

Unmanaged densification in the rural areas, land invasion and unmanaged urban expansion lead to inefficient urban form and functioning. The Spatial Development Framework for the Midvaal area promotes compact urban form through the nodal hierarchy. Informal settlements are shown on the Spatial Development Framework. These areas should be contained to their current extent to enable formalisation and upgrading and areas should be formalised and upgraded within specific guidelines for future development and provision of non-residential land uses.

In the formal urban areas densification is promoted in and around nodes and open spaces, subject to the availability and capacity of engineering services. The Land Use Management System should provide guidelines in terms of appropriate densities, height, coverage and floor area ratios.

The promotion of a hierarchy of nodes as concentration points for activities and non-residential uses is critical to achieve compact urban form and promote a viable public transport system. The location of existing and proposed nodes is indicated on the Spatial Development Framework. Further intensification of nodes should however be subject to the availability of engineering services.

Protection of property values and investment, particularly residential investment is extremely important; hence concentration of non-residential activities is promoted in nodes. These activities should however be of appropriate scale and intensity to complement the nodes. The Meyerton Central Business District should be promoted as the location for highest order goods and services. Neighbourhood supporting functions and uses should be supported in the Secondary and Tertiary Nodes.

The Spatial Development Framework ensures the protection of natural areas and prime agricultural land against urban sprawl. Natural areas of conservation and tourism significance are indicated, as well as land with high commercial agricultural value. The intrusion of urban uses and subdivision of land in these areas should be discouraged.

4.7 PROMOTION OF A HIERARCHY OF NODES

The Spatial Development Framework indicates the hierarchy of nodes for the Midvaal area. It also indicates the proposed location of service centres in the Secondary and Tertiary Nodes.

The exact location of the Tertiary Nodes has to be established in terms of the business plans for the Multi Purpose Community Centres. A concentration of economic and social activities and services in the nodes should be encouraged to promote viable levels of activity within these centres.

The following hierarchy of nodes is proposed:

- **PRIMARY NODE**: Meyerton CBD / Sicelo;

- **SECONDARY NODES**: Meyerton North and South, Doornkuil, Walkersville, De Deur, Vaal Marina.

- **TERTIARY NODES**: Henley on Klip, Mamello and Kliprivier.

- **PROPOSED AND EXISTING MULTI-PURPOSE COMMUNITY CENTRES**: Kliprivier, Doornkuil, Ohenimuri, Sicelo and Lakeside

Existing concentrations of non-residential development, particularly industrial and commercial in Randvaal, Highbury and Valley Settlements are also recognised as growth points along the R59 Highway.

The Secondary and Tertiary Nodes are seen as the prime areas for intensification of business and commercial uses. The high population densities just outside the Western boundary of Midvaal in Orange Farm were also considered in the Spatial Development Framework.

- **PRIMARY NODE - CENTRAL BUSINESS DISTRICTS [CBD'S]**

The major mixed use activity node within municipality is Meyerton. This area represents massive concentrations of public and private investment and is a huge asset which needs to be protected and maintained at all costs.

The Meyerton CBD is in a fair condition; however it requires strategic development guidance to ensure its long-term feasibility.

- **SECONDARY NODES - RURAL SERVICE CENTRES**

The concept of rural service centres entails the clustering of community services and facilities [e.g. schools, clinics, emergency services, pay points, community halls, etc.] in a central area serving a surrounding rural population. Such clustering of services obviously holds some economies of scale, e.g. multi-use and maximal utilization of facilities, transport cost savings, etc.

A number of rural service nodes are already present within the study area, as follows:

VAAL MARINA / MAMELLO: which is situated in the Southern extremity of Midvaal, abutting the Vaaldam. In addition to being a major recreational/tourism area, it also serves the rural population in the Southern parts of Midvaal Local Municipality.

WALKERVILLE / DE DEUR: These nodes, which are situated on Route R82, serve the rural population in the Western and North Western part of Midvaal between the R59 and N1 freeways.

DOORNKUIL: Development of such Secondary Nodes / Rural Service centres should be promoted and constructed simultaneously with the development of the township / infrastructure to ensure effective service delivery and sustainable community.

A detail audit of current services and facilities available in the abovementioned nodes needs to be done as part of the rural development strategy for Sedibeng DM / Midvaal LM, as well as a policy pertaining to those services

and facilities which should be established within such rural service centres, in addition to those which have already been established.

The district and the local municipalities should as a principle prioritise the strengthening and consolidation of the existing rural service nodes, before attempting to establish or develop new ones.

- **TERTIARY NODES**

The concept of Tertiary Nodes entails the clustering of community services and supporting facilities [e.g. schools, clinics, emergency services, pay points, community halls, etc.] in a central area serving a community / settlement.

- **EXISTING AND PROPOSED MULTI PURPOSE COMMUNITY CENTRES (MPC)**

The concept of Multi purpose Centres entails the clustering of community services and supporting facilities [e.g. schools, clinics, emergency services, pay points, community halls, etc.] for a specific community / settlement . Such clustering of services obviously holds some economies of scale, e.g. multi-use and maximal utilization of facilities, transport cost savings, etc.

- **Existing MPC**
  Lakeside, Sicelo

- **Proposed MPC**
  Kliprivier, Doornkuil, Ohenimuri

4.8 R59 – ECONOMIC DEVELOPMENT CORRIDOR

The economic development corridor includes the promotion of an economic hub within the R59 and M61(on the eastern side of the R59) as well as the commuter rail line, running parallel to one another from Meyerton North wards, provide an opportunity for the development of a fully fledged development corridor. The stretch of land on the Eastern side of the R59 already displays all the signs of a rudimentary development corridor, with a variety of industrial and commercial uses having established in this area, interspersed with residential development and stretches of vacant land.

Generally an economic development or activity corridor can be defined as a linear strip or area, approximately 500m to 2km wide, connecting large activity nodes, traversing urban or inter-urban areas, surrounding major transport facilities, providing an appropriate regional level of mobility and accessibility to adjacent areas, and containing a high concentration of population and mixed land uses [job opportunities]. In the context of the R59 as an economic corridor, it has the above mentioned characteristics.

The R59 corridor accommodates major linear transport routes which are the rail, freeways as well as the arterials. Along the corridor, there are areas or nodes for job opportunities [industrial, commercial and business], social, cultural and sporting facilities as well as the residential accommodation. Also, the R59 activity corridor incorporates activity spines, nodes and streets.

The R59 should be promoted and developed in accordance with the R59 Strategy. Furthermore a Development Framework for the R59 should be formulated which includes amongst other the type of land uses permitted, intensity and scale (e.g. Floor Area Ratio and Height) and aesthetical

guidelines (Urban Design) of the R59 Economic Development Corridor. (Refer to the R59 Strategy for more detail).

4.9 R82 – MOBILITY SPINE

The following principles will be applied in deciding on desirable and permissible land uses along the R82 Activity Spine:

- Protect the existing major nodes in the Midvaal LM area, specifically the CBD and industrial areas of Meyerton / Midvaal;
- Protect the corridor status of the R59 and prevent competition between the R59 and R82;
- Restrict development along the R82 to identified nodes;
- Limit and manage development permitted along the R82 to ensure that the road is upgraded to improve safety and service standards as well as protect the mobility function of the route;
- Protect the existing rural character and associated tourism potential of Midvaal Local Municipality along and / or in close proximity to the R82;
- Maintain the farms and agricultural holdings in the area for agricultural and rural residential purposes;
- Amenity and rural residential character along / adjacent to / in close proximity to the R82 should be protected.

4.10 URBAN RESIDENTIAL AREAS

Protect the amenity and character of the existing residential areas by means of:

- Not allowing non residential land uses within these areas;
- Promote residential densification in terms of Council Policy and availability of infrastructure;

4.11 INDUSTRIAL/ COMMERCIAL AREAS

The major industrial/commercial areas in the district are as follows :

Meyerton; Klipriver Business Park, Waterval, Highbury, Sybrand van Niekerk and Daleside / Witkop

Substantial parcels of vacant industrial-zoned land are still present within most of the abovementioned areas, development of these land parcels should receive priority. Light industrial and commercial development will be an important component of the land use mix which will eventually make up the proposed R59 economic development corridor.

As far as heavy/noxious industrial development is concerned, it should be ensured that adequate buffer zones are created between this development and surrounding residential development. These types of land uses need to be concentrated and strategically located in terms of compatible land uses and environmental impact, as well as accessibility.

4.12 INFORMAL SETTLEMENTS

The formalisation of informal settlements needs to be achieved through upgrading programmes. This is done as part of the low cost housing process, in terms of provincial housing subsidies.

4.13 RURAL RESIDENTIAL AND PERIPHERAL USES

Most of the agricultural holdings within the Midvaal LM area of jurisdiction, as well as some of the areas falling directly outside the proposed urban edge, are proposed for “Peripheral Uses” and “Rural Residential”.

There is almost never a sharp cut-off point between urban development and extensive agriculture, and it is therefore envisaged that a transitional area will develop on the agricultural holdings and around the urban edge, which may comprise of a range of different peripheral uses.

It is proposed that low intensity land uses associated and compatible with agricultural holdings and rural residential areas may be supported. Intensive agriculture should be promoted in these areas. If properly developed, these uses can actually support the urban edge and serve as a barrier to future expansion of the urban environment.

4.14 INTENSIVE AGRICULTURE

As indicated in the SDF Map, the majority of the rural hinterland within Midvaal LM area of jurisdiction is earmarked for agricultural uses. These areas are in the most remote parts of Midvaal Local Municipality and are furthest removed from existing urban activity.

The agricultural potential and land use must be protected.

4.15 AREAS REQUIRING FURTHER INVESTIGATION

- **DOORNKUIL AREA / SAVANNA CITY**

Doornkuil / Savanna City Township was approved by the Midvaal LM, subject certain conditions of which an Urban Management Plan must be approved.

- **VAAL MARINA STRATEGIC DEVELOPMENT AREA**

The Vaal Marina area which forms the Southern boundary of Midvaal Local Municipality, presents a major opportunity to diversify the local economy by means of major tourism and recreational development. The area is currently underdeveloped in terms of its potential.

A strategic development plan for this area should be drawn up as a matter of priority. Such a strategic development plan should include, *inter alia,* the following aspects:

a) detailed environmental assessment;
b) strategic development opportunities and objectives;
c) physical development plan;
d) operational and capital investment plan;
e) engineering services plan;

f) overall transportation plan;
g) identification of possible investors and major role players;
h) identification of markets; and
i) formulation of a comprehensive marketing plan.

In the interim, development management in this area must be done in collaboration with Gauteng Department Agriculture and Rural Development (GDARD previously known as Gauteng Department of Agricultural, Conservation and Environment (GDACE)) for the benefit of the Vaalriver system as a whole.

- **TEDDERFIED AH, GARTHDALE / KLIPWATER AND SURROUNDING AREAS**

These areas are not promoted for urban development / intensification / densification due to the following reasons : (Not limited to the following)

a) Lack of access to engineering services (capacity and availability);
b) Outside the Urban Edge;
c) Environmental sensitivity;
d) Geotechnical conditions;

However there are constant development pressures in these areas as a result of proposed development within the City of Johannesburg and Ekurhuleni Municipality's area of jurisdiction, whereby the proposed developments are located direct to the north of Tedderfield AH, Garthdale / Klipwater.

No large scale urban development will be considered prior to the compilation and approval of a comprehensive and detailed Development Framework Plan for the aforesaid areas.

Densification within the urban areas may be permitted, subject to the availability of infrastructure and in accordance with Council Policy.

4.16 FOCUS AREAS FOR LAND REFORM AND RURAL LED DEVELOPMENT

Land reform and rural local economic development are seen as crucial to the future political stability and economic growth within Midvaal local municipality.

Most areas in the Midvaal Local municipality, especially the land east of Meyerton is generally highly suitable for agricultural development. Areas between the Klipriver and the Suikerbosrand Nature Reserve are characterised by a high agricultural potential.

These area are characterized be intensive commercial crop cultivation, including dry land and irrigated crops.

4.17 ECO-TOURISM ACTIVITIES.

The R42, R549 and R54 has been classified as Tourism Corridors, and supportive tourism initiatives and hospitality land uses as per the Urban Edge Provincial Policy may be supported.

Eco-tourism activities and facilities in general should be actively promoted and properly developed in addition to the aforesaid Tourism Corridors, subject to the following criteria :

- Must be compatible with the character of the area;
- May not interfere with or negatively impact on the amenity of the area;
- Scale and Intensity must be compatible with the area;

CHAPTER 5: CONCLUSION

In conclusion, all attempts were made for the proposed Spatial Development Framework of the Midvaal Local Municipality to be aligned with the Sedibeng DM Spatial Development Framework.

The following should be addressed in improving the functionality of the Midvaal Local Municipality's Spatial Development Framework :

- **Approval of the re-aligned Urban Edge;**

- **Review and formulation of Land Use Management Policies which includes amongst other the following :**

  a) Annual Revision of the Midvaal LM's SDF and formulation of Regional Spatial Framework Plans;
  b) Development of Agricultural Land;
  c) Accommodation Policy;
  d) Nodal Policy;
  e) Density Policy;
  f) Development on and Subdivision of Agricultural Land Policy;
  g) R59 Development Framework Plan;
  h) Capital Investment Plan;

- **The formulation of a Land Use Management System comprising a single Land Use Management Scheme and GIS Data Base which are interconnected.**

- **A Regional Tourism Association to be established and commissioned by the Sedibeng DM in conjunction with the Midvaal LM, which will promote and develop tourism within the Midvaal LM's area of jurisdiction, as well as the formulation of Tourism Development Framework and Marketing of the area / region.**

- **Roads Classification Policy;**

- **Dolomite Risk Management Study / Policy**

LIST OF ACRONYMS:

AIDS	-	Acquired Immune Deficiency Syndrome
ASGISA	-	Accelerated and Shared Growth Initiative for South Africa
CBD	-	Central Business District
CIF	-	Capital Investment Framework
DBSA	-	Development Bank of Southern Africa
DFA	-	Development Facilitation Act
DITP	-	District Integrated Transport Plan
DLA	-	Department of Land Affairs
DM	-	District Municipality
DME	-	Department of Minerals and Energy
ELM	-	Emfuleni Local Municipality
EMP	-	Environmental Management Plan
ESKOM	-	Electricity Supply Commission (ESCOM)
GDP	-	Gross Domestic Product
GDRP	-	Gross Domestic Regional Product
GGP	-	Gross Geographic Product
GIS	-	Geographic Information Systems
GOSP	-	Gauteng Open Space Policy
GTA	-	Gauteng Tourism Authority
GUE	-	Gauteng Urban Edge
GSDF	-	Gauteng Spatial Development Framework
GVA	-	Gross Value Added
HIV	-	Human Immunodeficiency Virus
IDP	-	Integrated Development Plan
IPA	-	Implementation of Priority Areas
IRDP	-	Integrated Rural Development Programme
LED	-	Local Economic Developmen
LLM	-	Lesedi Local Municipality
LM	-	Local Municipality
LSDF	-	Local Spatial Development Framework
RSDF	-	Regional Spatial Development Framework
LUM	-	Land Use Management
LUMB	-	Land Use Management Bill
LUMS	-	Land Use Management Systems
MLM	-	Midvaal Local Municipality
MDGs	-	Millennium Development Goals
MPCCS	-	Multi-Purpose Community (Service) Centre
MSA	-	Municipal System Act
NSDP	-	National Spatial Development Perspective
PGDS	-	Provincial Growth and Development Strategy
STS	-	Sedibeng Tourism Strategy
PGDS	-	Provincial Growth and Development Strategy
SAR	-	South African Railways
SARCC	-	South African Rail Commuter Corporation
SDA	-	Spatial Development Areas
SDF	-	Spatial Development Framework
SDM	-	Sedibeng District Municipality
SDO	-	Spatial Development Objectives
SMME	-	Small Medium and Micro Enterprises
SoER	-	State of Environment Reporting
SWOT	-	Strength, Weaknesses, Objective and Threats analysis

DEFINITIONS

These definitions have been formulated to relate to the context of this document.

Access

Access is the right of way to enter and exit developments and properties by all transport modes and pedestrians. An access can take the form of either a roadway for vehicular traffic or a footway for pedestrians. Access roads on urban arterials are spaced at regular intervals in order to ensure synchronisation of traffic signals and efficient traffic operations.

Accessibility

Good accessibility is being able to reach a wide range of activities, people, resources, opportunities and information with the least effort and cost. This may require a degree of mobility to avoid unnecessary wastage of energy and time in getting from origin to destination along public ways or crowded lines of communication, where long queues may prevail. This may also require overcoming non-physical obstacles such as lack of information (about a good or service) or improving the affordability of goods and services.

Arterials / spines / routes/ roads

Roads classified as municipal or provincial roads fulfilling the function of collectors and distributors of traffic. These roads have a higher order function than local access providers to residential and non-residential land uses in suburbs.

Blue IQ

Is the Provincial Agency established through the Provincial Department of Finance and Economic Affairs to implement key projects in the Province.

Bonded Housing

Housing developed by means of a bond granted by a financial institution, usually associated with private sector/open market housing.

Conservation

The management of the use of natural and human resources to ensure that such resources are preserved and protected against undesirable development and change so that these assets may benefit future generations. Besides championing sustainable use of resources, conservation also involves the protection, maintenance and rehabilitation of resources.

Compact

A compact urban form increases efficiency in the way people can use the city and the way in which the city is run. More people live in a smaller area in a compact city and this higher density allows for efficient provision of public transport, social and other services. The antithesis of a compact city is urban sprawl.

Declining Areas

Areas showing signs of economical or physical neglect. The high incidence of illegal land uses is usually an early indicator. Depressed areas have a declining economy.

Density (residential)

Gross residential density is the overall number of dwelling units divided by the total size of the area. Net residential density expresses the number of dwelling units divided by the size of the area that is taken up by residential use only. This is expressed as the number of units per hectare.

Residential densification is encouraged along arterials / major routes as well as in and around nodes as they make the provision of services and public transport more viable.

Development Proposal

A proposal to change the current use of an area or parcel of land. It includes sub-divisions, rezoning and township establishments. Also included would be the "land development applications" as per the Development Facilitation Act, 1995.

Development Rights

The legal rights linked to land, not to the owner of the land, according to which the owner can develop the property or land.

Ecotourism

Ecotourism is environmentally friendly travel and visitation to relatively undisturbed natural areas and conducted in an ecologically sustainable manner to enjoy and appreciate nature and any accompanying cultural features (both past and present). The activity promotes conservation, has low negative visitor impact and provides for beneficially active socio-economic involvement of local communities.

It includes activities such as outdoor and tourism related activities including hiking trails, hotels, 4x4 trails, restaurants, curio markets, conference facilities, wedding venues, game parks and other similar uses with a rural character not causing a nuisance or having a detrimental effect on the environment.

Ensuring Strong Viable Nodes Strategy

This strategy in the Spatial Development Framework provides the municipality's definition and response to the development and management of nodes

Five-year Integrated Development Plan (IDP)

A plan to integrate development and management of municipal areas as stipulated in the Municipal Systems Act, 2000.

Fragmented Development

Urban development that takes place in an ad hoc fashion without being integrated into, or related to, the surrounding areas. It results in a break in the urban fabric.

Greenfield Development

Urban development on previously unserviced, vacant land that had been used for agriculture or other non-urban uses.

Gautrain

Provincial rapid rail project aimed at improving connectivity and time travelled between Tshwane, Johannesburg and the OR Tambo International Airport.

Growth and Development Strategy

Is the Sedibeng DM's understanding of the longer-term strategic direction it should take, and the future efforts, undertaken jointly with social partners, needed to accelerate economic growth and enhance development in a way that both benefits residents of Midvaal and contributes to the further transformation of South Africa as a whole.

Guideline
Guidelines form a framework within which decisions are taken that will support an overall vision or strategy. Guidelines could be presented in a variety of forms, such as precinct plans and Council policies.

Integrated Development Plan: All local councils are required to formulate and implement an Integrated Development Plan incorporating land use planning, transportation planning, infrastructure planning and the promotion of economic development, taking cognisance of needs and priorities as determined by the council concerned.

Infill
The development of undeveloped or underdeveloped land within a developed urban area with infrastructure (link services) available.

Ingress / Egress
Entrance / exit to a property.

Intensification
The process of intensifying activities or land use by increasing the floor area, height or number of activities.

Inter-modal Transport
The integration and co-ordination of services, infrastructure and facilities between all modes within the transport system.

Land Use
The activities on a defined piece of land such as residential, commercial, industrial or a mixture of these.

Land Development Objective (LDO)
A requirement in terms of the Development Facilitation Act, 65 of 1995. A methodology and end product are given that result in an integrated development plan for an area in which the community have had input.

In Gauteng the process has been superseded by the Integrated Development Plans. (See IDP) and the associated spatial development frameworks.

Leap-frog development
Development which takes place on undeveloped land, separating the new township from existing development. It is thus not contiguous with existing development. Usually motivated by the lower cost of land on the municipal's periphery. Contributes to urban sprawl.

Local Economic Development (LED)
LED is a locally driven process, designed to identify, harness and utilise resources to stimulate the economy and create new job opportunities. LED is not one specific action or programme, but the sum total of individual contributions of a broad spectrum of the community.

LED occurs when the local authority, business, labour, NGOs and – most importantly – individuals strive to improve their economic status by combining skills, resources and ideas (National Business Initiative, 1998: 2).

Level of Service (LOS)
The level of infrastructure service is the relative sophistication and convenience of the service provided.

Managing Urban Growth and Delineating an Urban Development Boundary

This strategy in the Spatial Development Framework describes the Municipality's initiative to contain the Municipality's growth through the designation a development boundary.

Mixed land use

Mixed land use refers to a combination of land uses such as a mix of commercial / industrial / residential / retail / entertainment / institutional uses. It also refers to a mix of uses within a specific use. The advantage of mixed uses is that access and convenience are increased as transportation distances are decreased. The combination depends on the specific area. A mixed-use building could refer to retail at street level, institutional on the floor above and residential on the top floors. Mixed land use in an industrial area could include industry and commercial

Mobility

Mobility is the degree of free flow movement of vehicles and pedestrians. It is the ability to move at an acceptable speed and travel time without undue interruption and at acceptable levels of comfort, convenience and safety. Mobility and accessibility have an indirectly proportionate relationship whereby restricted or limited access will result in high mobility.

Mobility Road

A Mobility Road carries mainly traffic of a local nature. The focus is on mobility along the route. It is of a lower order than a Mobility Spine. It often connects Mobility Spines or neighbourhood nodes.

Mobility Spine

A Mobility Spine is an arterial along which traffic flows with minimum interruption (optimal mobility), whilst development abutting the Spine is in terms of specific policy criteria relating to the type of land use to be accommodated and to level of access.

Modal Transfer Station

A facility at which public transport passengers can change vehicle or mode.

Nodes

A node is a place where both private and public investment tends to concentrate. Nodes are usually associated with major road intersections, or with public transport nodes such as railway stations and taxi ranks. It offers the opportunity to locate a range of activities, from small to large enterprises and is often associated with mixed-use development including higher-density residential use. An important element that influences the notion of activity nodes is density.

When combined with the diverse activities in a node, densification facilitates the limiting of the node radii to walking distance. An advantage of high-density nodes is that economies of scale can be exploited in terms of public infrastructure provision and private investment. Nodes differ in size, the types of activity that occur within them, the size of the areas served and the significance within the municipality.

Non Urban Residential Use / Rural Residential

Land in rural areas utilised mainly for residential purposes.

Red Data species
Classified endangered species.

Road hierarchy
The classification of all roads in terms of their level of importance in a transportation network. The roads are classified in terms of the functions performed and the characteristics of each road in the transportation network.

Service Delivery Business Implementation Plan (SDBIP)
A municipality's plan for the provision of services identified in terms of its Integrated Development Plan. The SDBIP is assessed quarterly by national government.

Scoping Assessment
The process of collecting data and the interpretation thereof to determine if any environmental issue will accrue due to a proposed or intended development.

Social Housing
Housing provided in terms of a government subsidy scheme.

Town Planning Scheme (TPS)
A planning tool that sets out use rights pertaining to land. The information is kept in a set of regulations and on a zoning map.

Urban Agriculture
The cultivation of crops within the urban areas and on the urban fringes, for subsistence or commercial purposes. The activity is often of a small scale and a high intensity.

Urban Development Boundary / Urban Edge
A demarcated line that serves to direct and control the outer limits of urban expansion. Outside the continuous urban development of the municipality's core area, urban development should only be permitted within small towns and rural nodes, and in areas where the environment and agriculture are not compromised.

Urban fabric
This refers to the way in which buildings, roads and open spaces relate to one another. Where there are wide streets, plenty of open spaces between buildings, and large blocks, the urban fabric is said to be coarse. A fine urban fabric would refer to an area where the buildings are in close proximity to one another, the block size is small and there are narrower, but many roads.

Urban sprawl
An undesirable situation in which the geographical size of the municipality keeps expanding to include development of new peripheral areas. Costs of providing and maintaining services to peripheral areas is high, public transportation is not efficient and access to urban opportunities minimal. The antithesis of a compact city.

Vision
A vision expresses a commonly desired future for the area. It conveys the ideal towards which the area is collectively striving. It is an idealised picture of how the region could and should function.

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28°0'0"E
28°15'0"E
28°30'0"E
26°30'0"S
26°45'0"S
27°0'0"S

City of Johannesburg Metropolitan Municipality(JHB)

Ekurhuleni Metropolitan Municipality(EKU)

Gauteng

Lesedi Local Municipality(GT423)

Sedibeng (District)

Emfuleni Local Municipality(GT421)

Midvaal Local Municipality (GT422)

Dipaleseng Local Municipality(MP306)

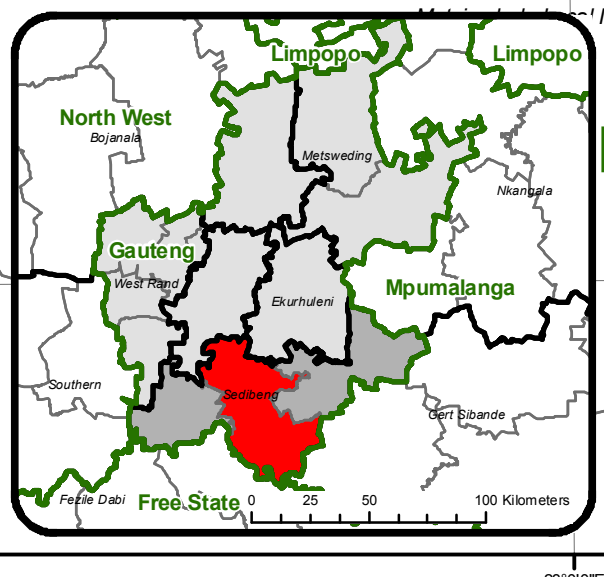
Mpumalanga

N
W
E
S

Fezile Dabi (District)

Gert Sibande (District)

Municipality(FS204)



Free State

- Midvaal Local Municipality
- Sedibeng District Municipality
- Gauteng Province
- Municipal Boundary
- District Boundary
- Provincial Boundary

MAP 1

SPATIAL DEVELOPMENT FRAMEWORK 2009 / 2010

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Date: 25 January 2010

LOCALITY PLAN

1. REINVENTING THE ECONOMY
   - Promote Establishment of Manufacturing Sector
   - Tourism & Leisure
   - Residential Property Development
   - Agriculture
2. RENEWING OUR COMMUNITIES
   - Change Nature of Housing Delivery
   - Concentrate Investment in Nodes
3. REVIVE OUR ENVIRONMENT
   - Manage the Environment
4. REINVENTING OUR REGION
   - Improved Transport Connectivity & Revitalization of Corridors
   - Logistic Support
5. RELEASING HUMAN POTENTIAL
   - Network of Leaders

Spatial Development Framework:

Activity Nodes:
- Primary Node
- Secondary Node

Activity Corridors:
- Tourism Corridor/Mobility Spine
- Development Corridor
- Current Urban Edge
- Proposed Extension to Urban Edge
- Protected Area
- Conservancy Area

General Legend:
- Ward Boundary
- Municipal Boundary
- District Boundary

Broad Land Uses:
- Sports Development Focus Area
- Open Space Development Area
- CBD Development Plan Focus Area
- Existing Golf Club
- Low Density Residential (Rural Residential)
- Industrial Re-Development Focus Area
- Mixed Land Use
- Focus Area: Possible Precinct Plans
- Residential Area (Densification, Maintain & Upliftment)
- Tourism Focus Area
- Rural Development: Agriculture
- Waterbody
- Housing Project
- LED Project

Movement System:
- Railway Line
- Proposed Freeway
- Proposed Provincial Road
- Existing Freeway
- Existing Provincial Road
- Other Access Road

N W E S

0 2.5 5 10 Kilometers

MAP 2 BROAD LAND USES AND SPATIAL PATTERNS

(SDF EXCLUDING ENVIRONMENTAL INFORMATION)

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Date: 25 January 2010

28°0'0"E
28°15'0"E
26°30'0"S
26°45'0"S
27°0'0"S

N1
R82
R550
K146
R59
KLIPRIVIER
R553
R558
R557
RIETSPRUIT
NATALSPRUIT
BLESBOKLAAGTE
R550
Heidelberg Military Base
R42
M61
VARKENSFONTEINSPRUIT
R551
R82R551/R82
Suikerbosrand
LANGKUILSPRUIT
FOURIESPRUIT
Alice Glöckner
Waldrift
R54
Leeuwkuil
VAALRIVIER
SUIKERBOSRANTRIVIER
R549
N3
Vaaldam
VAALDAM

N
W
E
S

0 5 10 20 Kilometers

Non Perennial River
Perennial River
Freeway
Main Road
Secondary Road
Open Space
Conservancy Area
Protected Area
Dolomite and Chert
Class 1 - Ridge
Class 2 - Ridge
Class 3 - Ridge
Class 4 - Ridge
Mine / Quarry
Waterbody
Wetland
Woodland
Midvaal Local Municipality
Midvaal Boundary
District Boundary

MAP 3

SPATIAL DEVELOPMENT FRAMEWORK 2009 / 2010

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Date: 25 January 2010

MIDVAAL

ENVIRONMENTAL

KAGISANO Geo-Spatial Services

28°0'0"E
28°15'0"E
26°30'0"S
26°45'0"S
27°0'0"S

N1
R82
R59
R42
R550
R23
R42
N3
R42
R549
R54

WALKERVILLE
DE DEUR
EVATON
VEREENIGING
SHARPEVILLE
HEIDELBERG/RATANDA
VAAL MARINA

N
W
E
S

0 5 10 20 Kilometers

- Mobility Spine
- High Mobility Corridor
- Proposed Access/Mobility Road
- Tourism Corridor
- Development Corridor
- Existing Freeway
- Existing Provincial Road
- Proposed Freeway
- Proposed Provincial Road
- Other Access Road
- Rail Network
- Waterbody
- Urban Settlement
- Midvaal Local Municipality
- District Boundary

MAP 4

SPATIAL DEVELOPMENT FRAMEWORK 2009 / 2010

MOVEMENT SYSTEM

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Date: 25 January 2010

MIDVAAL

KAGISANO Geo-Spatial Services

28°0'0"E
28°15'0"E
26°30'0"S
26°45'0"S
27°0'0"S

N1
R82
R59
R42
R550
R23
R42
N3
R42
R549
R54

Tedderfield AH
Eikenhof
Hartzenbergfontein AH
Walkerville
Golf View AH
De Deur/Walkerville
Ohenimuri
Golf View AH
Homestead Apple Orchards AH
De Deur/Walkerville
Ironside
The Balmoral Estates
Walkers Fruit Farms AH
Lakeside Estates
The De Deur Estates
The Evaton Estate
Ophir AH
Ophir AH Ext 1
Golf Park
Meyerton Ext 6
Meydustria
Sybrand van Niekerk Park
Sherman Park AH
Kookrus
Vosterpark AH
Rothdene
Riversdale
Bolton Wold AH
Glen Donald AH
Bolton Wold SH
Buyscelia AH
Risisville
Risi Sh
Duncanville
Homelands AH
Moolland AH
River Park AH
Van Der Westhuizenhoogte AH
Helderstrome AH
Nelsonia AH
Cooperville AH
Vaal Marina
Garndale AH
Gardenvale AH
Pendale AH
Valley Settlements
Valley Settlements Highbury
Walkers Fruit Farms SH
Henley on Klip
Schoongezicht AH
Witkopsdorp (Daleside)

PWV13
PWV18
PWV19
PWV20
PWV22

0 5 10 20 Kilometers

N W E S

- Rail Network
- Existing Freeway
- Existing Provincial Road
- Proposed Freeway
- Proposed Provincial Road
- Other Access Road
- Mobility Spine
- High Mobility Corridor
- Proposed Acces/Mobility Road
- Tourism Corridor
- Development Corridor
- Waterbody
- Tourism Focus Area
- Rural Development: Agriculture
- Ward_Profile2006
- Midvaal Boundary
- District Boundary
- Existing Golf Club
- Residential Area (Densification, Maintain & Upliftment)

MAP 5

SPATIAL DEVELOPMENT FRAMEWORK 2009 / 2010

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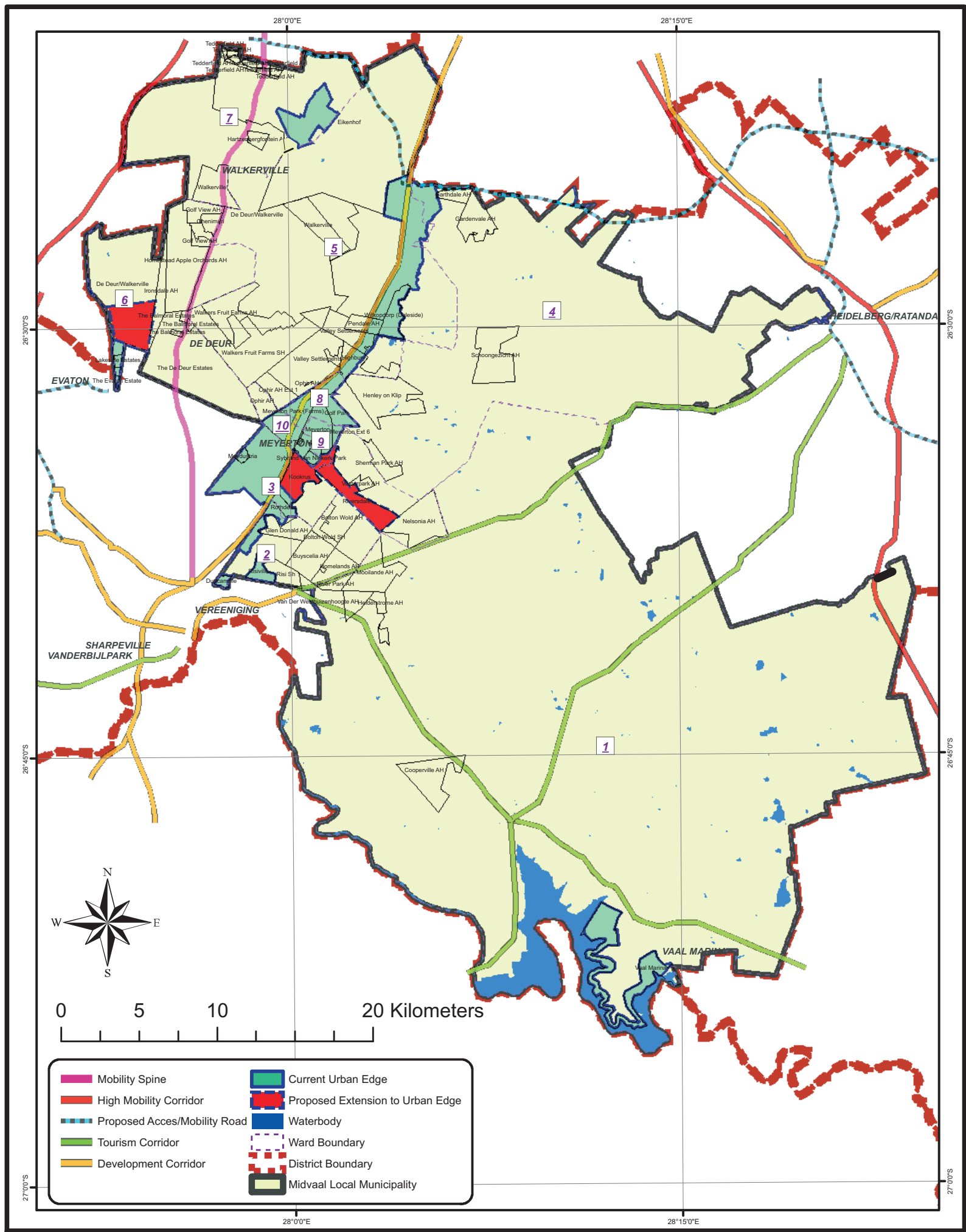
Date: 25 January 2010

BROAD LAND USE

MIDVAAL

KAGISANO Geo-Spatial Services



MAP 6

SPATIAL DEVELOPMENT FRAMEWORK 2010 / 2011

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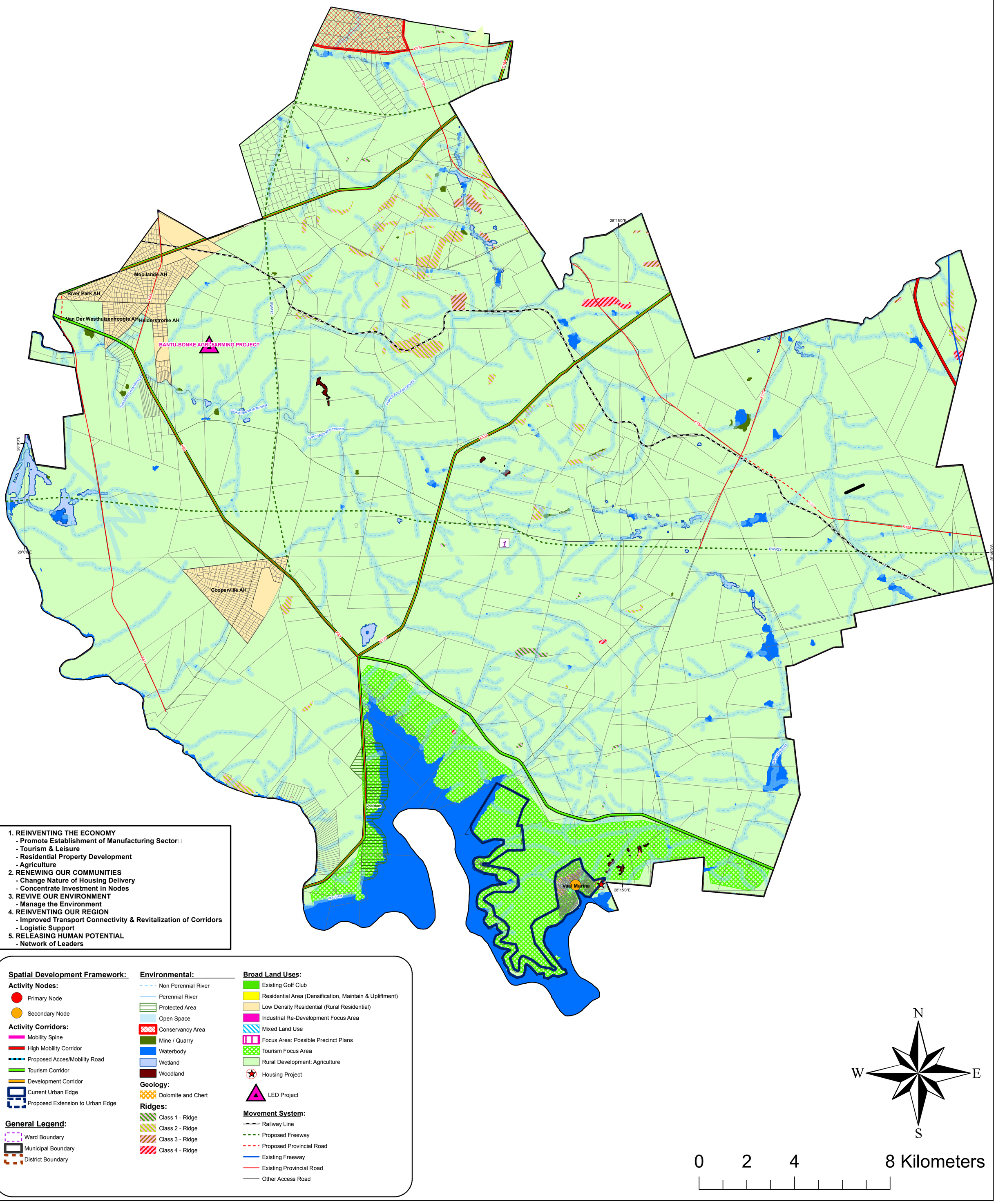
Date: 25 January 2010

URBAN DEVELOPMENT BOUNDARY



1. REINVENTING THE ECONOMY
   - Promote Establishment of Manufacturing Sector
   - Tourism & Leisure
   - Residential Property Development
   - Agriculture
2. RENEWING OUR COMMUNITIES
   - Change Nature of Housing Delivery
   - Concentrate Investment in Nodes
3. REVIVE OUR ENVIRONMENT
   - Manage the Environment
4. REINVENTING OUR REGION
   - Improved Transport Connectivity & Revitalization of Corridors
   - Logistic Support
5. RELEASING HUMAN POTENTIAL
   - Network of Leaders

Spatial Development Framework:

Activity Nodes:
- Primary Node
- Secondary Node

Activity Corridors:
- Mobility Spine
- High Mobility Corridor
- Proposed Acces/Mobility Road
- Tourism Corridor
- Development Corridor
- Current Urban Edge
- Proposed Extension to Urban Edge

General Legend:
- Ward Boundary
- Municipal Boundary
- District Boundary

Environmental:
- Non Perennial River
- Perennial River
- Protected Area
- Open Space
- Conservancy Area
- Mine / Quarry
- Waterbody
- Wetland
- Woodland

Geology:
- Dolomite and Chert

Ridges:
- Class 1 - Ridge
- Class 2 - Ridge
- Class 3 - Ridge
- Class 4 - Ridge

Broad Land Uses:
- Existing Golf Club
- Residential Area (Densification, Maintain & Upliftment)
- Low Density Residential (Rural Residential)
- Industrial Re-Development Focus Area
- Mixed Land Use
- Focus Area: Possible Precinct Plans
- Tourism Focus Area
- Rural Development: Agriculture
- Housing Project
- LED Project

Movement System:
- Railway Line
- Proposed Freeway
- Proposed Provincial Road
- Existing Freeway
- Existing Provincial Road
- Other Access Road

N
W E
S

0 2 4 8 Kilometers

MAP 7A

SPATIAL DEVELOPMENT FRAMEWORK 2009 / 2010

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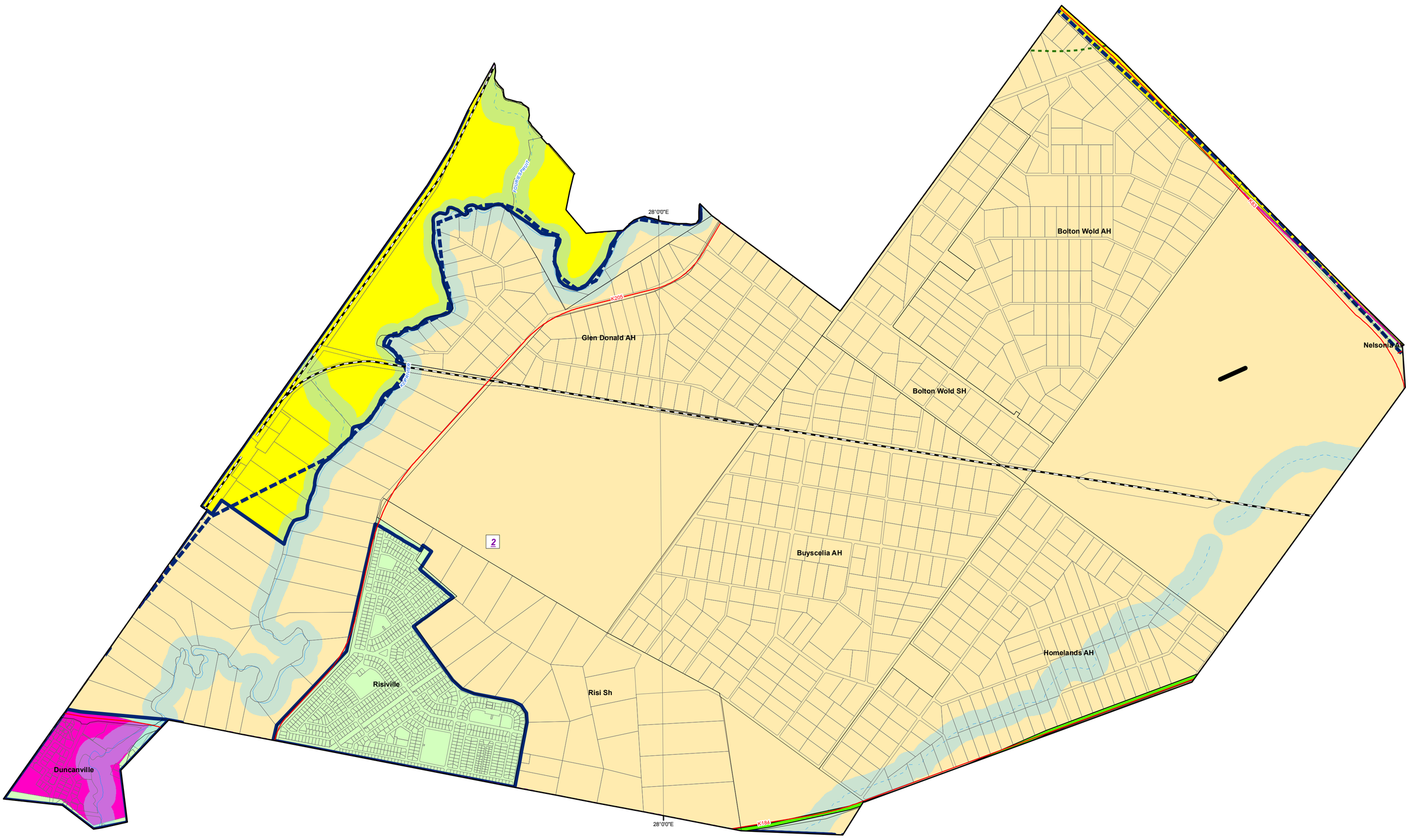
MIDVAAL LOCAL MUNICIPALITY

WARD 1

KAGISANO Geo-Spatial Services



1. REINVENTING THE ECONOMY
   - Promote Establishment of Manufacturing Sector
   - Tourism & Leisure
   - Residential Property Development
   - Agriculture
2. RENEWING OUR COMMUNITIES
   - Change Nature of Housing Delivery
   - Concentrate Investment in Nodes
3. REVIVE OUR ENVIRONMENT
   - Manage the Environment
4. REINVENTING OUR REGION
   - Improved Transport Connectivity & Revitalization of Corridors
   - Logistic Support
5. RELEASING HUMAN POTENTIAL
   - Network of Leaders

Spatial Development Framework:

Activity Nodes:
- Primary Node
- Secondary Node

Activity Corridors:
- Mobility Spine
- High Mobility Corridor
- Proposed Acces/Mobility Road
- Tourism Corridor
- Development Corridor
- Current Urban Edge
- Proposed Extension to Urban Edge

General Legend:
- Ward Boundary
- Municipal Boundary
- District Boundary

Environmental:
- Non Perennial River
- Perennial River
- Protected Area
- Open Space
- Conservancy Area
- Mine / Quarry
- Waterbody
- Wetland
- Woodland

Geology:
- Dolomite and Chert

Ridges:
- Class 1 - Ridge
- Class 2 - Ridge
- Class 3 - Ridge
- Class 4 - Ridge

Broad Land Uses:
- Existing Golf Club
- Residential Area (Densification, Maintain & Upliftment)
- Low Density Residential (Rural Residential)
- Industrial Re-Development Focus Area
- Mixed Land Use
- Focus Area: Possible Precinct Plans
- Tourism Focus Area
- Rural Development: Agriculture
- Housing Project
- LED Project

Movement System:
- Railway Line
- Proposed Freeway
- Proposed Provincial Road
- Existing Freeway
- Existing Provincial Road
- Other Access Road

N
W E
S

0 0.5 1 2 Kilometers

MAP 7B

SPATIAL DEVELOPMENT FRAMEWORK 2009 / 2010

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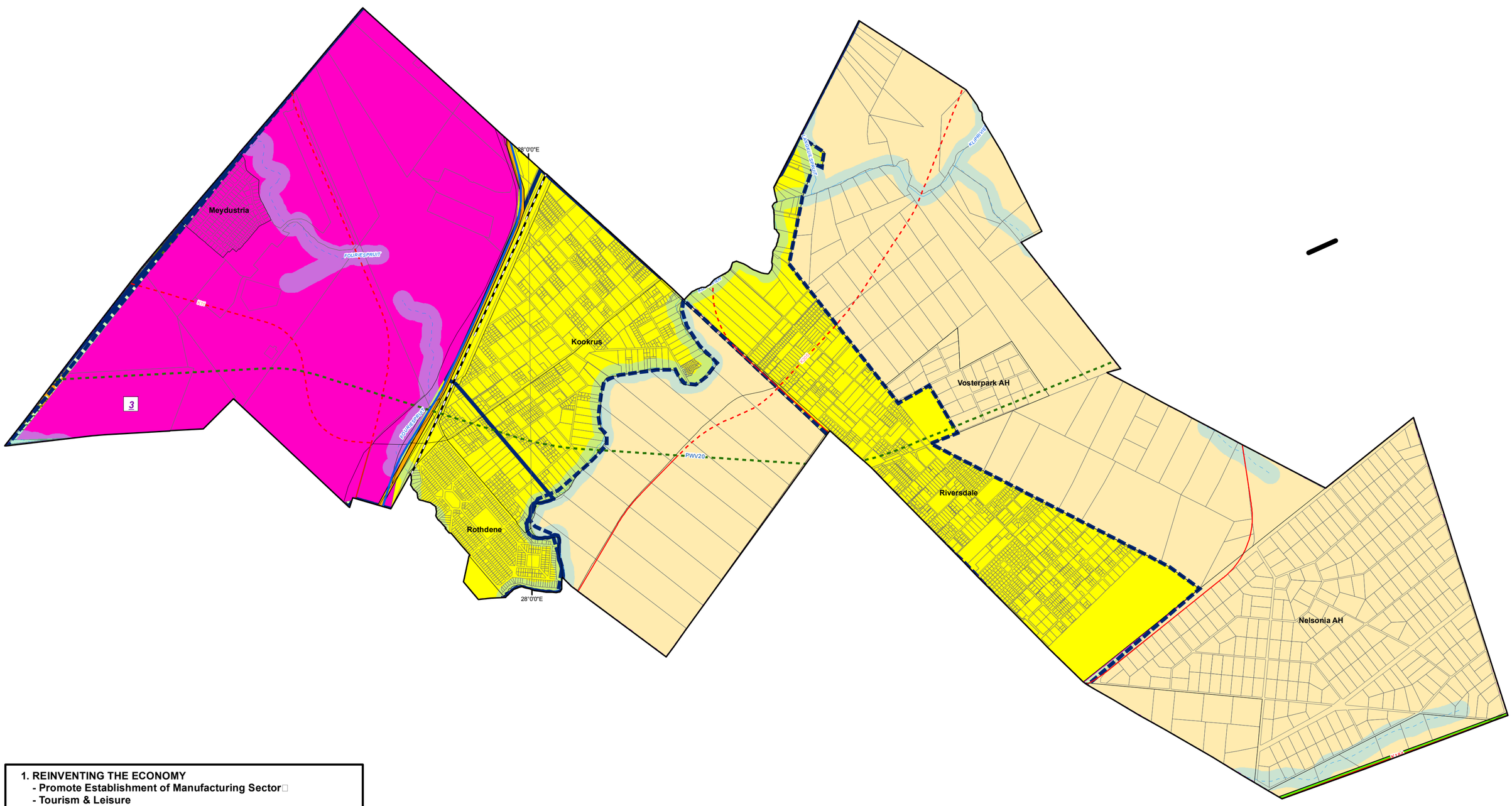
MIDVAAL LOCAL MUNICIPALITY

KAGISANO Geo-Spatial Services

WARD 2



1. REINVENTING THE ECONOMY
   - Promote Establishment of Manufacturing Sector
   - Tourism & Leisure
   - Residential Property Development
   - Agriculture
2. RENEWING OUR COMMUNITIES
   - Change Nature of Housing Delivery
   - Concentrate Investment in Nodes
3. REVIVE OUR ENVIRONMENT
   - Manage the Environment
4. REINVENTING OUR REGION
   - Improved Transport Connectivity & Revitalization of Corridors
   - Logistic Support
5. RELEASING HUMAN POTENTIAL
   - Network of Leaders

Spatial Development Framework:

Activity Nodes:
- Primary Node
- Secondary Node

Activity Corridors:
- Mobility Spine
- High Mobility Corridor
- Proposed Acces/Mobility Road
- Tourism Corridor
- Development Corridor
- Current Urban Edge
- Proposed Extension to Urban Edge

General Legend:
- Ward Boundary
- Municipal Boundary
- District Boundary

Environmental:
- Non Perennial River
- Perennial River
- Protected Area
- Open Space
- Conservancy Area
- Mine / Quarry
- Waterbody
- Wetland
- Woodland

Geology:
- Dolomite and Chert

Ridges:
- Class 1 - Ridge
- Class 2 - Ridge
- Class 3 - Ridge
- Class 4 - Ridge

Broad Land Uses:
- Existing Golf Club
- Residential Area (Densification, Maintain & Upliftment)
- Low Density Residential (Rural Residential)
- Industrial Re-Development Focus Area
- Mixed Land Use
- Focus Area: Possible Precinct Plans
- Tourism Focus Area
- Rural Development: Agriculture
- Housing Project
- LED Project

Movement System:
- Railway Line
- Proposed Freeway
- Proposed Provincial Road
- Existing Freeway
- Existing Provincial Road
- Other Access Road

N
W E
S

0 0.5 1 2 Kilometers

MAP 7C

SPATIAL DEVELOPMENT FRAMEWORK 2009 / 2010

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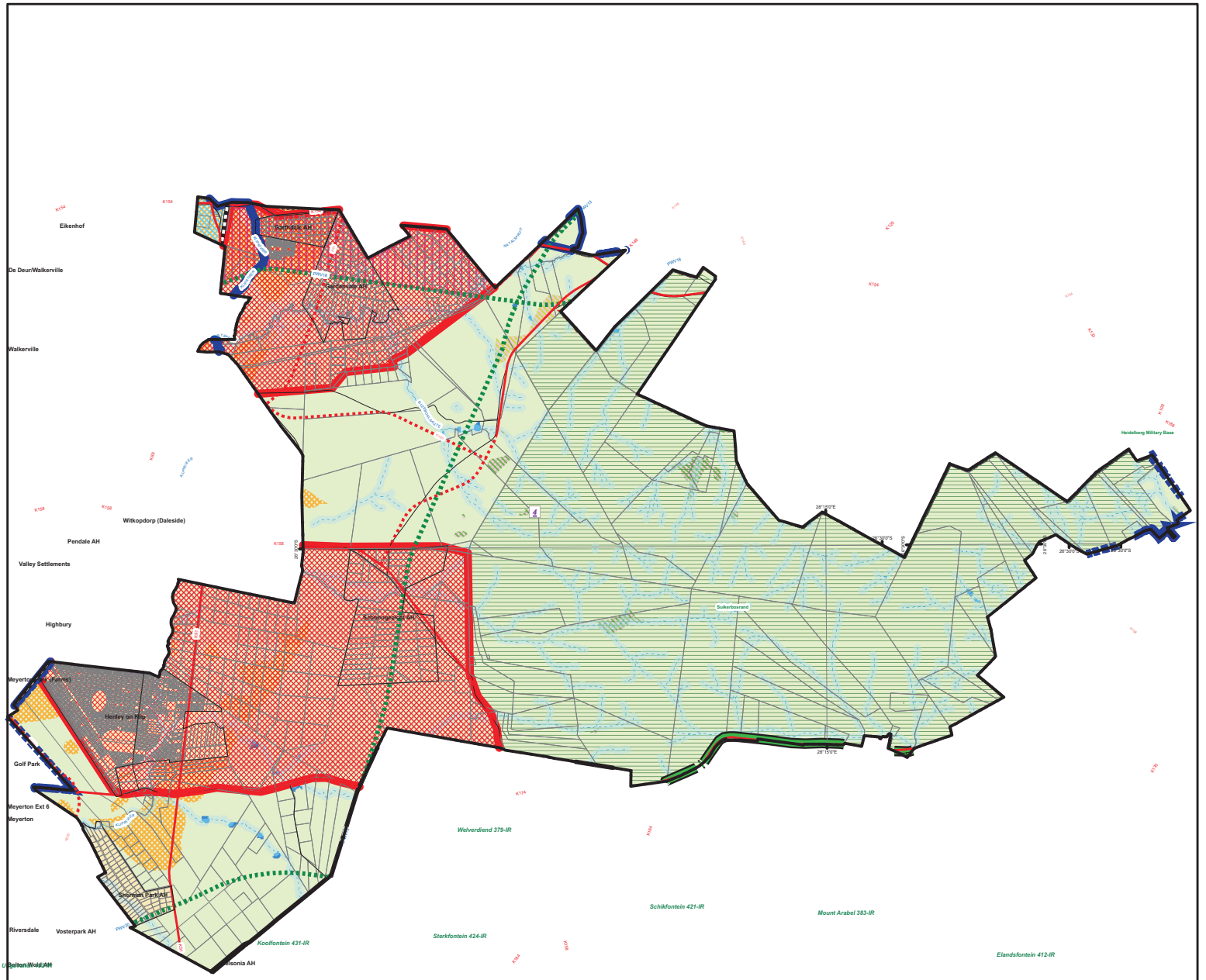
Date: 25 January 2010

MIDVAAL LOCAL MUNICIPALITY

WARD 3

KAGISANO Geo-Spatial Services



1. REINVENTING THE ECONOMY
   - Promote Establishment of Manufacturing Sector
   - Tourism & Leisure
   - Residential Property Development
   - Agriculture
2. RENEWING OUR COMMUNITIES
   - Change Nature of Housing Delivery
   - Concentrate Investment in Nodes
3. REVIVE OUR ENVIRONMENT
   - Manage the Environment
4. REINVENTING OUR REGION
   - Improved Transport Connectivity & Revitalization of Corridors
   - Logistic Support
5. RELEASING HUMAN POTENTIAL
   - Network of Leaders

Spatial Development Framework:

Activity Nodes:
- Primary Node
- Secondary Node

Activity Corridors:
- Tourism Corridor/Mobility Spine
- Development Corridor
- Current Urban Edge
- Proposed Extension to Urban Edge

General Legend:
- Ward Boundary
- Municipal Boundary
- District Boundary

Environmental:
- Non Perennial River
- Perennial River
- Open Space

Geology:
- Dolomite and Chert

Ridges:
- Class 1 - Ridge
- Class 2 - Ridge
- Class 3 - Ridge
- Class 4 - Ridge
- Protected Area
- Conservancy Area

Broad Land Uses:
- Sports Development Focus Area
- Open Space Development Area
- CBD Development Plan Focus Area
- Existing Golf Club
- Low Density Residential (Rural Residential)
- Industrial Re-Development Focus Area
- Mixed Land Use
- Focus Area: Possible Precinct Plans
- Residential Area (Densification, Maintain & Upliftment)
- Tourism Focus Area
- Rural Development: Agriculture
- Waterbody
- Housing Project
- LED Project

Movement System:
- Railway Line
- Proposed Freeway
- Proposed Provincial Road
- Existing Freeway
- Existing Provincial Road
- Other Access Road

MAP 7D

SPATIAL DEVELOPMENT FRAMEWORK 2010 / 2011

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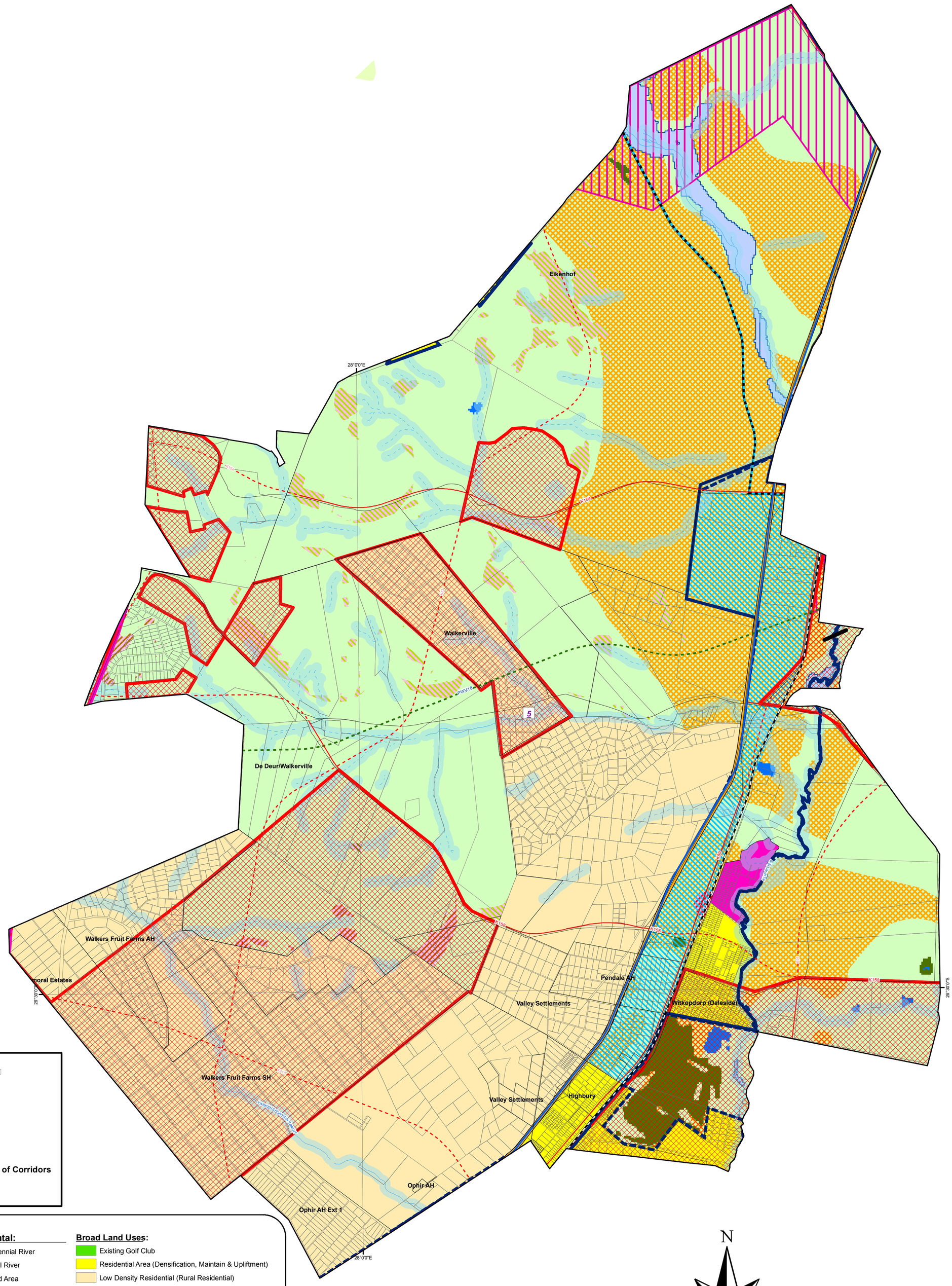
Date: 25 January 2010

WARD 4

MIDVAAL

KAGISANO Geo-Spatial Services



1. REINVENTING THE ECONOMY
   - Promote Establishment of Manufacturing Sector
   - Tourism & Leisure
   - Residential Property Development
   - Agriculture
2. RENEWING OUR COMMUNITIES
   - Change Nature of Housing Delivery
   - Concentrate Investment in Nodes
3. REVIVE OUR ENVIRONMENT
   - Manage the Environment
4. REINVENTING OUR REGION
   - Improved Transport Connectivity & Revitalization of Corridors
   - Logistic Support
5. RELEASING HUMAN POTENTIAL
   - Network of Leaders

Spatial Development Framework:

Activity Nodes:
- Primary Node
- Secondary Node

Activity Corridors:
- Mobility Spine
- High Mobility Corridor
- Proposed Acces/Mobility Road
- Tourism Corridor
- Development Corridor
- Current Urban Edge
- Proposed Extension to Urban Edge

General Legend:
- Ward Boundary
- Municipal Boundary
- District Boundary

Environmental:
- Non Perennial River
- Perennial River
- Protected Area
- Open Space
- Conservancy Area
- Mine / Quarry
- Waterbody
- Wetland
- Woodland

Geology:
- Dolomite and Chert

Ridges:
- Class 1 - Ridge
- Class 2 - Ridge
- Class 3 - Ridge
- Class 4 - Ridge

Broad Land Uses:
- Existing Golf Club
- Residential Area (Densification, Maintain & Upliftment)
- Low Density Residential (Rural Residential)
- Industrial Re-Development Focus Area
- Mixed Land Use
- Focus Area: Possible Precinct Plans
- Tourism Focus Area
- Rural Development: Agriculture
- Housing Project
- LED Project

Movement System:
- Railway Line
- Proposed Freeway
- Proposed Provincial Road
- Existing Freeway
- Existing Provincial Road
- Other Access Road

N
W E
S

0 1.25 2.5 5 Kilometers

MAP 7E

SPATIAL DEVELOPMENT FRAMEWORK 2009 / 2010

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Date: 25 January 2010

MIDVAAL LOCAL MUNICIPALITY

WARD 5

KAGISANO Geo-Spatial Services

Golf View AH
Ohenimuri
Golf View AH
De Deur/Walkerville
Homestead Apple Orchards AH
De Deur/Walkerville
De Deur/Walkerville
Ironsdale AH
The Balmoral Estate
The Balmoral Estate
The Balmoral Estates
Lakeside Estates
The De Deur Estates
6

1. REINVENTING THE ECONOMY
   - Promote Establishment of Manufacturing Sector
   - Tourism & Leisure
   - Residential Property Development
   - Agriculture
2. RENEWING OUR COMMUNITIES
   - Change Nature of Housing Delivery
   - Concentrate Investment in Nodes
3. REVIVE OUR ENVIRONMENT
   - Manage the Environment
4. REINVENTING OUR REGION
   - Improved Transport Connectivity & Revitalization of Corridors
   - Logistic Support
5. RELEASING HUMAN POTENTIAL
   - Network of Leaders

Spatial Development Framework:

Activity Nodes:
- Primary Node
- Secondary Node

Activity Corridors:
- Mobility Spine
- High Mobility Corridor
- Proposed Acces/Mobility Road
- Tourism Corridor
- Development Corridor
- Current Urban Edge
- Proposed Extension to Urban Edge

General Legend:
- Ward Boundary
- Municipal Boundary
- District Boundary

Environmental:
- Non Perennial River
- Perennial River
- Protected Area
- Open Space
- Conservancy Area
- Mine / Quarry
- Waterbody
- Wetland
- Woodland

Geology:
- Dolomite and Chert

Ridges:
- Class 1 - Ridge
- Class 2 - Ridge
- Class 3 - Ridge
- Class 4 - Ridge

Broad Land Uses:
- Existing Golf Club
- Residential Area (Densification, Maintain & Upliftment)
- Low Density Residential (Rural Residential)
- Industrial Re-Development Focus Area
- Mixed Land Use
- Focus Area: Possible Precinct Plans
- Tourism Focus Area
- Rural Development: Agriculture
- Housing Project
- LED Project

Movement System:
- Railway Line
- Proposed Freeway
- Proposed Provincial Road
- Existing Freeway
- Existing Provincial Road
- Other Access Road

N
W
E
S

0 0.5 1 2 Kilometers

MAP 7F

SPATIAL DEVELOPMENT FRAMEWORK 2009 / 2010

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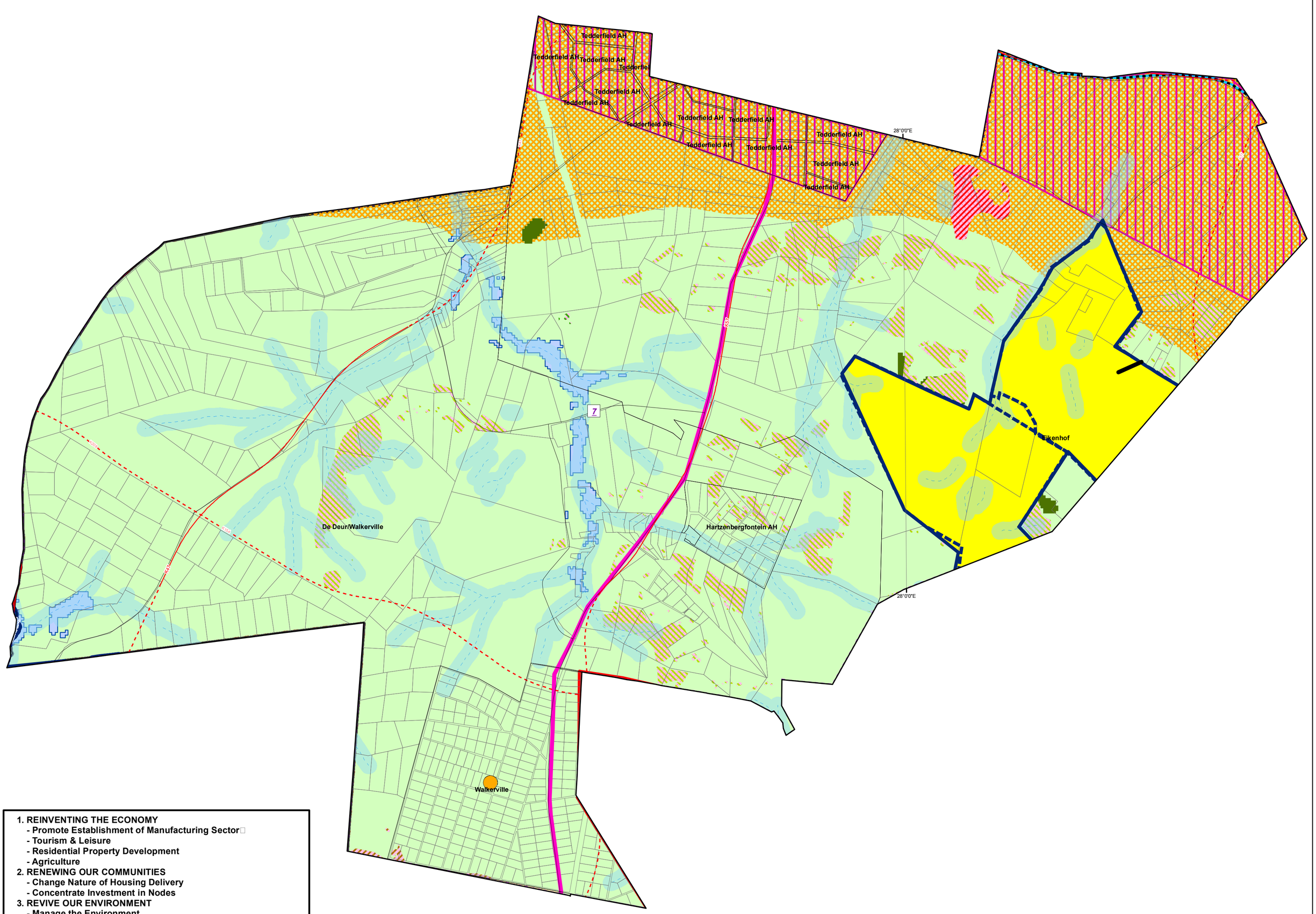
Date: 25 January 2010

MIDVAAL LOCAL MUNICIPALITY

WARD 6

KAGISANO Geo-Spatial Services



MAP 7G

SPATIAL DEVELOPMENT FRAMEWORK 2009 / 2010

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Website: www.kagisano-geospatial.co.za

Date: 25 January 2010

MIDVAAL LOCAL MUNICIPALITY

KAGISANO Geo-Spatial Services

WARD 7

1. REINVENTING THE ECONOMY
   - Promote Establishment of Manufacturing Sector
   - Tourism & Leisure
   - Residential Property Development
   - Agriculture
2. RENEWING OUR COMMUNITIES
   - Change Nature of Housing Delivery
   - Concentrate Investment in Nodes
3. REVIVE OUR ENVIRONMENT
   - Manage the Environment
4. REINVENTING OUR REGION
   - Improved Transport Connectivity & Revitalization of Corridors
   - Logistic Support
5. RELEASING HUMAN POTENTIAL
   - Network of Leaders

Spatial Development Framework:

Activity Nodes:
- Primary Node
- Secondary Node

Activity Corridors:
- Mobility Spine
- High Mobility Corridor
- Proposed Acces/Mobility Road
- Tourism Corridor
- Development Corridor
- Current Urban Edge
- Proposed Extension to Urban Edge

General Legend:
- Ward Boundary
- Municipal Boundary
- District Boundary

Environmental:
- Non Perennial River
- Perennial River
- Protected Area
- Open Space
- Conservancy Area
- Mine / Quarry
- Waterbody
- Wetland
- Woodland

Geology:
- Dolomite and Chert

Ridges:
- Class 1 - Ridge
- Class 2 - Ridge
- Class 3 - Ridge
- Class 4 - Ridge

Broad Land Uses:
- Existing Golf Club
- Residential Area (Densification, Maintain & Upliftment)
- Low Density Residential (Rural Residential)
- Industrial Re-Development Focus Area
- Mixed Land Use
- Focus Area: Possible Precinct Plans
- Tourism Focus Area
- Rural Development: Agriculture
- Housing Project
- LED Project

Movement System:
- Railway Line
- Proposed Freeway
- Proposed Provincial Road
- Existing Freeway
- Existing Provincial Road
- Other Access Road

N W E S

0 0.25 0.5 1 Kilometers

MAP 7H

SPATIAL DEVELOPMENT FRAMEWORK 2009 / 2010

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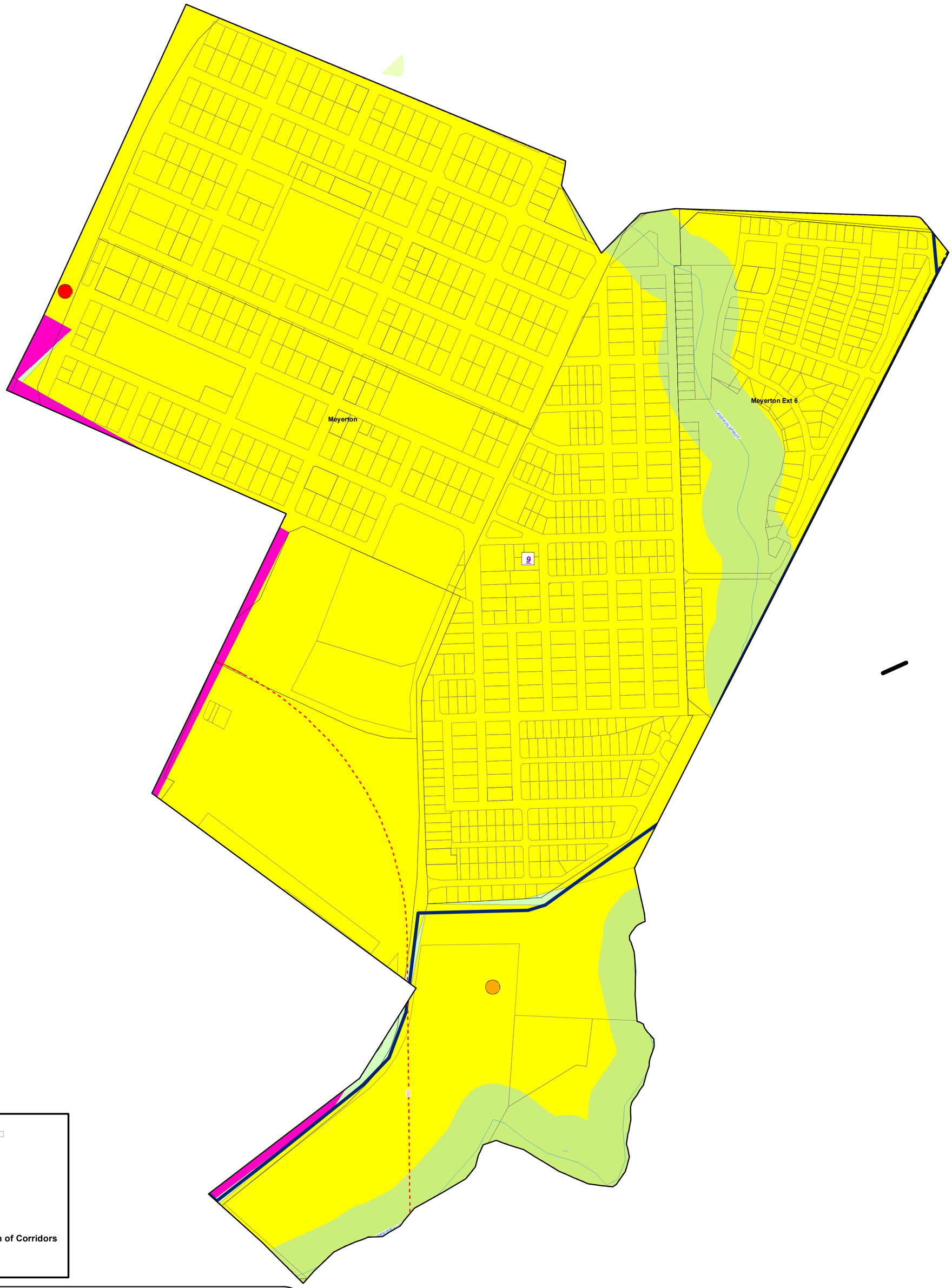
Website: www.kagisano-geospatial.co.za

Date: 25 January 2010

MIDVAAL LOCAL MUNICIPALITY

KAGISANO Geo-Spatial Services

WARD 8



1. REINVENTING THE ECONOMY
   - Promote Establishment of Manufacturing Sector
   - Tourism & Leisure
   - Residential Property Development
   - Agriculture
2. RENEWING OUR COMMUNITIES
   - Change Nature of Housing Delivery
   - Concentrate Investment in Nodes
3. REVIVE OUR ENVIRONMENT
   - Manage the Environment
4. REINVENTING OUR REGION
   - Improved Transport Connectivity & Revitalization of Corridors
   - Logistic Support
5. RELEASING HUMAN POTENTIAL
   - Network of Leaders

Spatial Development Framework:

Activity Nodes:
- Primary Node
- Secondary Node

Activity Corridors:
- Mobility Spine
- High Mobility Corridor
- Proposed Acces/Mobility Road
- Tourism Corridor
- Development Corridor
- Current Urban Edge
- Proposed Extension to Urban Edge

General Legend:
- Ward Boundary
- Municipal Boundary
- District Boundary

Environmental:
- Non Perennial River
- Perennial River
- Protected Area
- Open Space
- Conservancy Area
- Mine / Quarry
- Waterbody
- Wetland
- Woodland

Geology:
- Dolomite and Chert

Ridges:
- Class 1 - Ridge
- Class 2 - Ridge
- Class 3 - Ridge
- Class 4 - Ridge

Broad Land Uses:
- Existing Golf Club
- Residential Area (Densification, Maintain & Upliftment)
- Low Density Residential (Rural Residential)
- Industrial Re-Development Focus Area
- Mixed Land Use
- Focus Area: Possible Precinct Plans
- Tourism Focus Area
- Rural Development: Agriculture
- Housing Project
- LED Project

Movement System:
- Railway Line
- Proposed Freeway
- Proposed Provincial Road
- Existing Freeway
- Existing Provincial Road
- Other Access Road

N
W E
S

0 0.25 0.5 1 Kilometers

MAP 7I

SPATIAL DEVELOPMENT FRAMEWORK 2009 / 2010

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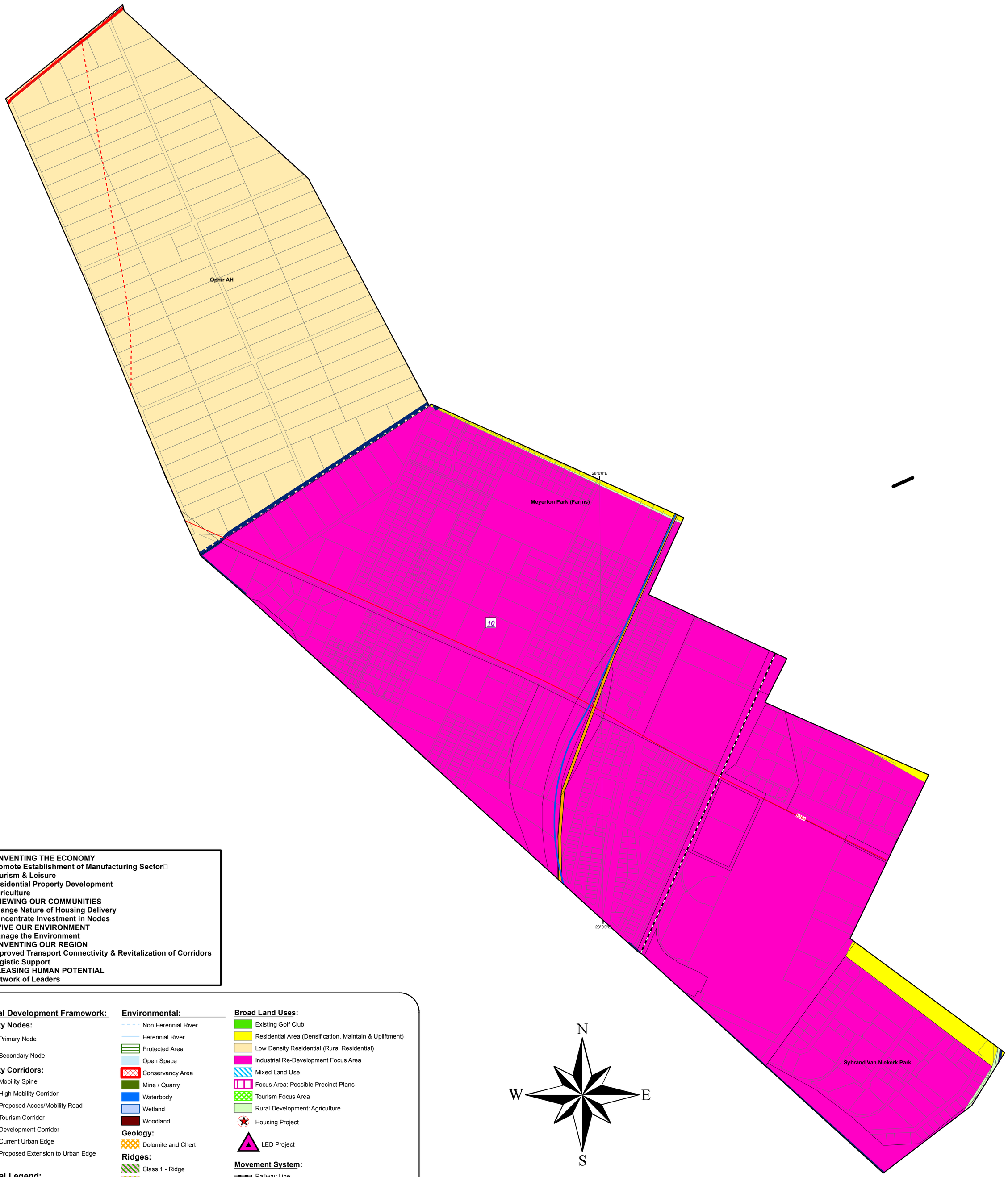
Date: 25 January 2010

WARD 9

MIDVAAL LOCAL MUNICIPALITY

KAGISANO Geo-Spatial Services



1. REINVENTING THE ECONOMY
   - Promote Establishment of Manufacturing Sector
   - Tourism & Leisure
   - Residential Property Development
   - Agriculture
2. RENEWING OUR COMMUNITIES
   - Change Nature of Housing Delivery
   - Concentrate Investment in Nodes
3. REVIVE OUR ENVIRONMENT
   - Manage the Environment
4. REINVENTING OUR REGION
   - Improved Transport Connectivity & Revitalization of Corridors
   - Logistic Support
5. RELEASING HUMAN POTENTIAL
   - Network of Leaders

Spatial Development Framework:

Activity Nodes:
- Primary Node
- Secondary Node

Activity Corridors:
- Mobility Spine
- High Mobility Corridor
- Proposed Acces/Mobility Road
- Tourism Corridor
- Development Corridor
- Current Urban Edge
- Proposed Extension to Urban Edge

General Legend:
- Ward Boundary
- Municipal Boundary
- District Boundary

Environmental:
- Non Perennial River
- Perennial River
- Protected Area
- Open Space
- Conservancy Area
- Mine / Quarry
- Waterbody
- Wetland
- Woodland

Geology:
- Dolomite and Chert

Ridges:
- Class 1 - Ridge
- Class 2 - Ridge
- Class 3 - Ridge
- Class 4 - Ridge

Broad Land Uses:
- Existing Golf Club
- Residential Area (Densification, Maintain & Upliftment)
- Low Density Residential (Rural Residential)
- Industrial Re-Development Focus Area
- Mixed Land Use
- Focus Area: Possible Precinct Plans
- Tourism Focus Area
- Rural Development: Agriculture
- Housing Project
- LED Project

Movement System:
- Railway Line
- Proposed Freeway
- Proposed Provincial Road
- Existing Freeway
- Existing Provincial Road
- Other Access Road

MAP 7J

SPATIAL DEVELOPMENT FRAMEWORK 2009 / 2010

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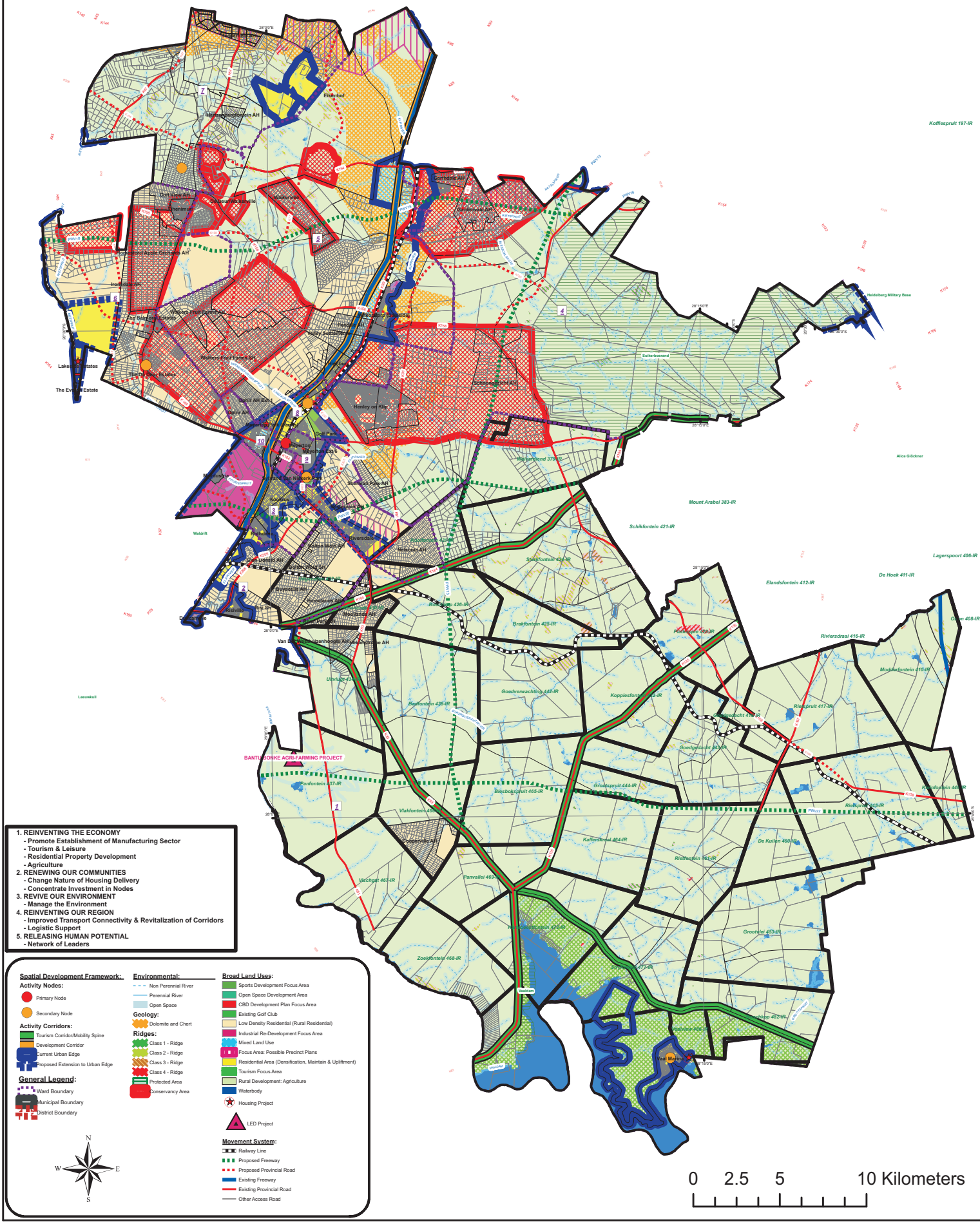
WARD 10

MIDVAAL LOCAL MUNICIPALITY

KAGISANO Geo-Spatial Services



MAP 8

SPATIAL DEVELOPMENT FRAMEWORK 2010 / 2011

(SDF INCLUDING MOVEMENT SYSTEM AND ENVIRONMENTAL INFORMATION)

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MIDVAAL

KAGISANO Geo-Spatial Services